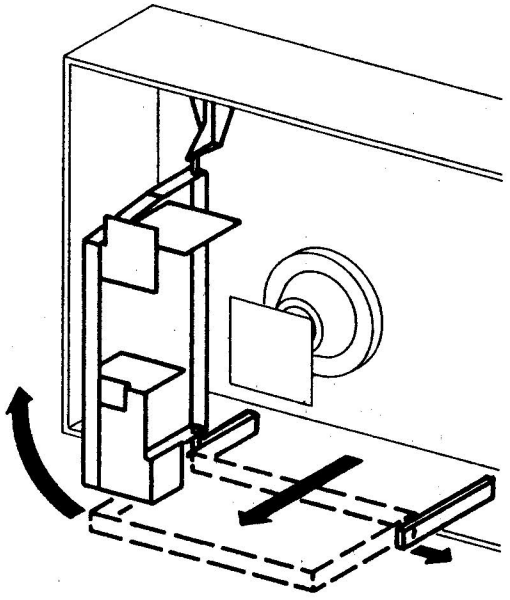
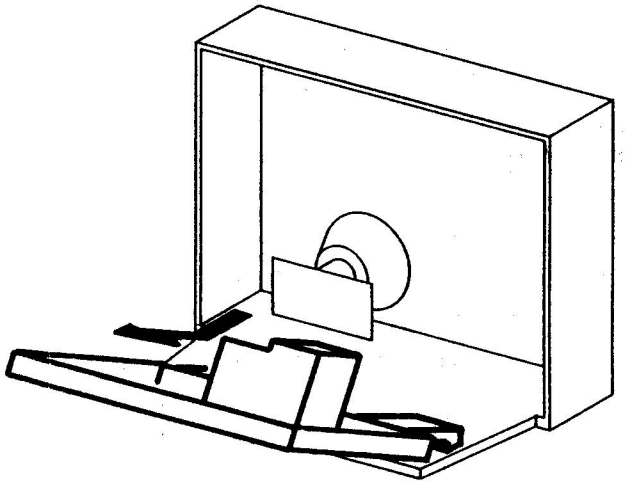
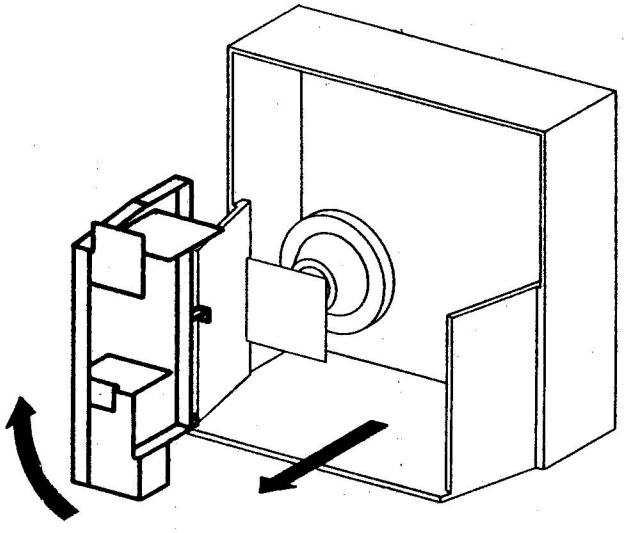
Servicestellung
Service position
Posizione di servizio





GRUNDIG
CUC 2400

VERS. A:
GER. MIT NORMAL ROEHRE
SETS WITH NORMAL PICTURE TUBE
APP. CON CINESC. NORMALE



VERS. B:
GER. MIT RECHTECK ROEHRE U. WUERFELGEH.
SETS WITH FULL SQUARE TUBE AND CUBE CABINET
APP. CON CINESC. RETTANG. E MOBILE A CUBO

VERS. C:
GER. MIT RECHTECK ROEHRE
SETS WITH FULL SQUARE TUBE
APP. CON CINESC. RETTANG.

(25153)

Servicehinweise für Schaltnetzteil: Gerät mit Netztrenntransformator betreiben. Primärseite des Schaltnetzteiles liegt an Netzpotential. Bei fehlender Sekundärspannung oder Takten des Netzteiles Sekundärstromkreise einzeln unterbrechen und Funktion überprüfen.
Suchschema bei Nichtschwingen des Sperrwandlers.

- ⟶ Anlaufspannung (Pin 9/5) < 8 V Anlauf über Di 616 u. R 616.
- ⟶ Referenzspannung (Pin 1) ca. 6 V
- ⟶ Startimpuls (Pin 4) ①
- ⟶ Basisstromansteuerung (Pin 7) ②

C 626 muß vor Wechsel des IC 631 entladen sein! Netzteilregelbereich 160 bis 260 V~

Service hints for switch-mode power supply: operate set with mains-isolating transformer (n. b. the primary side of the SM power supply is normally not isolated, if there is no secondary voltage or the power supply pulsates, disconnect the secondary circuits individually and check operation. Fault finding scheme if blocking function prevents oscillation:

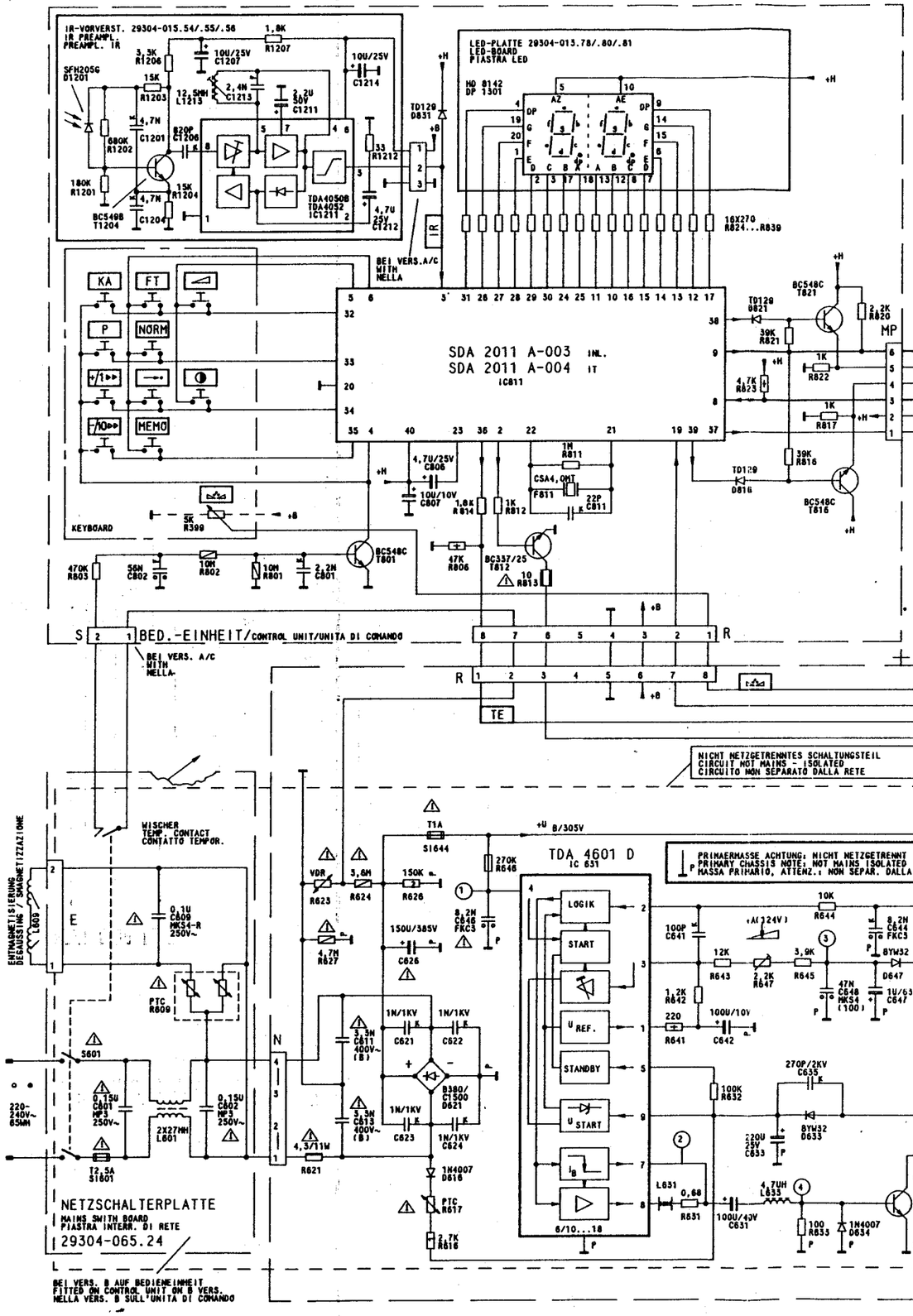
- ⟶ Starting voltage (Pin 9/5) < 8 V, starting via Di 616 and R 616
- ⟶ Reference voltage (Pin 1) approx. 6 V
- ⟶ Start pulse (Pin 4) ①
- ⟶ Base current drive (Pin 7) ②

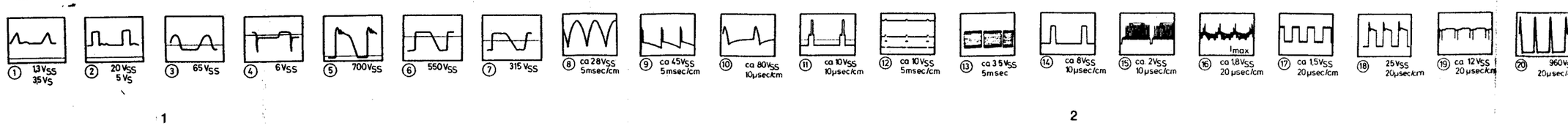
Before replacement of IC 631, C 626 must be discharged. Power supply range 160 to 260 V AC.

Avvertenze di Servizio dell'alimentatore: Alimentare l'apparecchio con un trasformatore separatore. Il lato primario dell'alimentatore é a potenziale di rete. Se viene a mancare la tensione del secondario o in caso di intervento ritmico dell'alimentatore, interrompere uno alla volta i circuiti dell secondario e controllarne la funzione. Se il trasduttore di interdizione non viene eccitato, ricercare il guasto secondo lo schama seguente:

- ⟶ Tensione di avviamento (pin 9/5) < 8 V. Avviamento tramite Di 616 e R 616.
- ⟶ Tensione di riferimento (pin 1) ca. 6 V.
- ⟶ Impulso di avviamento (pin 4) ①
- ⟶ Pilotaggio della corrente di base (pin 7) ②

Il C 626 deve essere scarico prima di cambiare l'IC 631! Campo di regolazione dell'alimentatore: 160 a 260 V ~.





K.-TUNER 29504-101.01
CABLE TV TUNER
TUNER TV CAVO

ZF-VERST. 29504-102.21/.22
IF AMPL
AMPL. FI
-112.21 GB
-162.21 MULTI

VIDEOTEXT 29504-108.01 WORD
-108.11 SUED
TELETEXT
TELEVIDEO

FARB/RGB 29504-105.01
COLOUR / RGB
COLORE / RVB
-105.21 CTI
-165.01 MULTI

TDA8442
IC350

ABLENKUNG DEFLECTION/DEFLESSIONE
VERS. A 29504-107.21
VERS. B/C -107.22
VERS. A -007.26
VERS. B/C -007.29
NICHT BEI MULTI
NOT WITH MULTI
MANCA NEL MULTI

TY 40164
IC666

MC 78M05CT
IC676

TDA 1905
IC 365

29504-065.24

EURO-AV-BUCHSE
EURO-AV SOCKET
PRESA EURO-AV

OFFEN BEI IT./OPEN IN IT. VERS.
APERTO NELLA VERS. IT.

OFFEN BEI MULTI
OPEN WITH MULTI
APERTO NEL MULTI

GESCHL. BEI MULTI
CLOSED WITH MULTI
CHIUSO NEL MULTI

BEI VERS. B AUF
BED.-EINHEIT.
FITTED ON CONTROL
UNIT ON B VERS.
NELLA VERS. B
SULL'UNITA DI COMANDO

ENTF. BEI VIDEOTEXT
DELETED WITH TELETEXT
MANCANO CON TELEVIDEO

SERVICE SIEHE SEITE 6-8
SERVICE SEE PAGE 6-8
SERVIZIO VEDI PAGINA 6-8

I² C-BUS

NICHT NETZGETRENNTES SCHALTUNGSTEIL
CIRCUIT NOT MAINS - ISOLATED
CIRCUITO NON SEPARATO DALLA RETE

TR 651 ⚠
29500-617.01

PRIMAERMASSE ACHTUNG: NICHT NETZGETRENNT
PRIMARY CHASSIS NOTE: NOT MAINS ISOLATED
MASSA PRIMARIO, ATTENZ.: NON SEPAR. DALLA RETE

4601 D

SIEHE C527
SEEN
VEDI

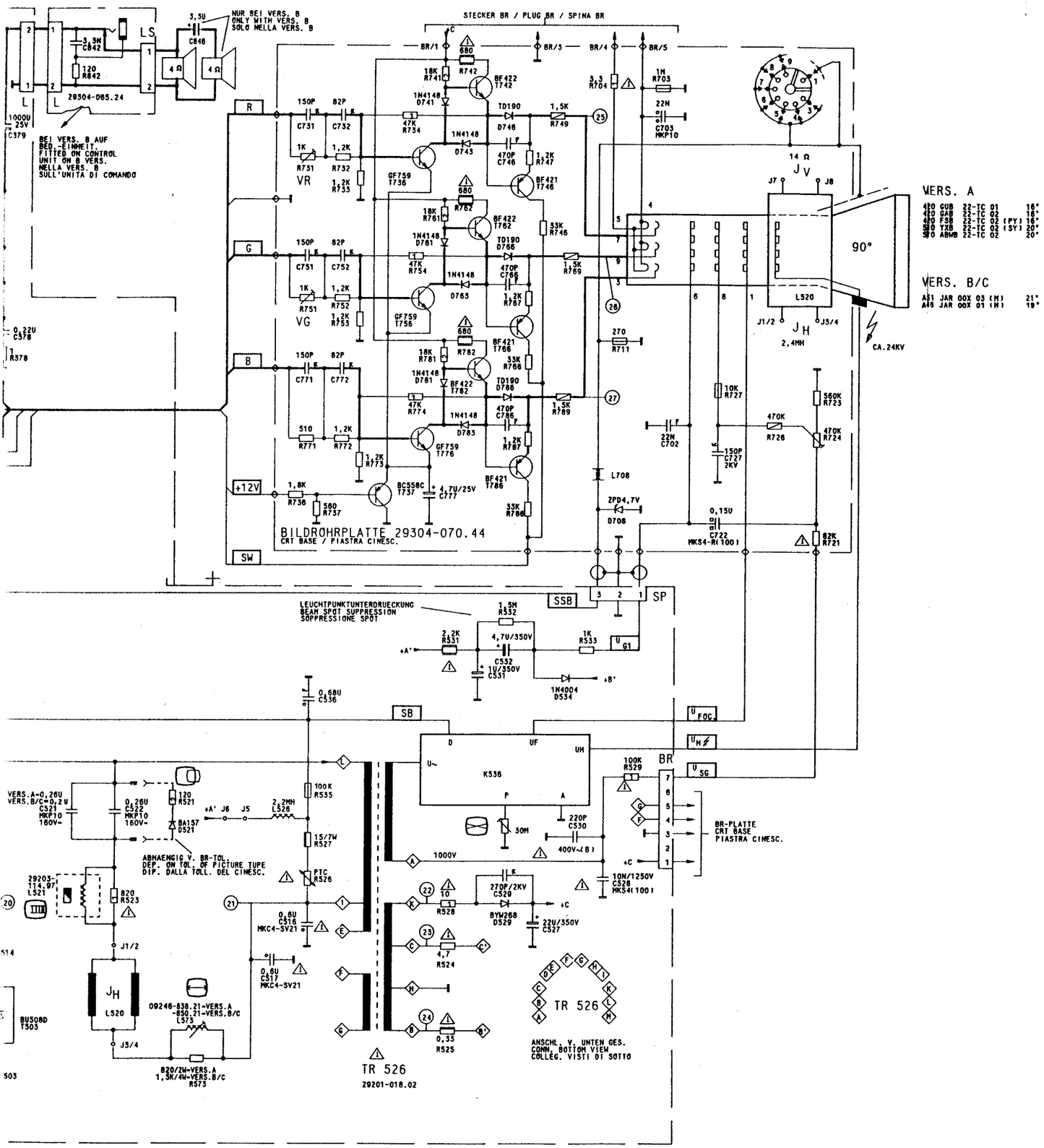
CUC 2400

CHASSIS VERS. A 29701-040.02 CTI (20")
TELAIO -040.04 GB (20")
-040.06 (20")
-040.12 CTI (16")
-040.13 (16")
-040.14 GB (16")

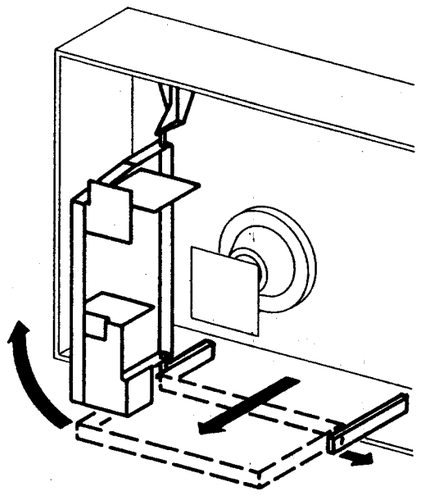
CHASSIS VERS. B/C 29701-040.01 CTI
TELAIO -040.07 MULTI

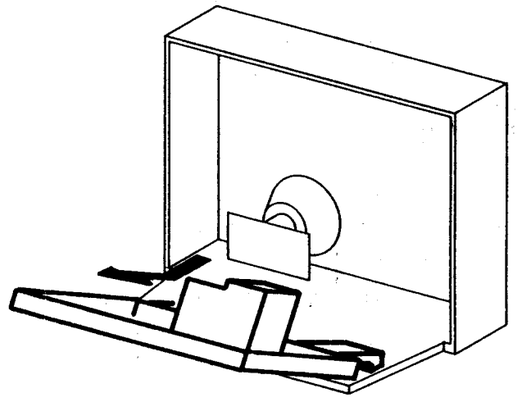
PRINTED IN GERMANY
AENDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION / CON RISERVA DI MODIFICHE

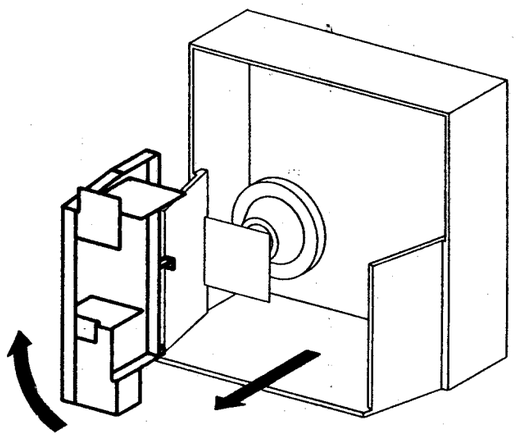
⑦ 315 V_{SS} ⑧ ca.28 V_{SS} 5msec/cm ⑨ ca.45 V_{SS} 5msec/cm ⑩ ca 80 V_{SS} 10µsec/cm ⑪ ca 10 V_{SS} 10µsec/cm ⑫ ca 10 V_{SS} 5msec/cm ⑬ ca.3.5 V_{SS} 5msec ⑭ ca 8 V_{SS} 10µsec/cm ⑮ ca 2 V_{SS} 10µsec/cm ⑯ ca 1.8 V_{SS} 20µsec/cm ⑰ ca 1,5 V_{SS} 20µsec/cm ⑱ 25 V_{SS} 20µsec/cm ⑲ ca 12 V_{SS} 20µsec/cm ⑳ 960 V_{SS} 20µsec/cm ㉑ 25 V_{SS} 20µsec/cm ㉒ 250 V_{SS} 20µsec/cm ㉓ 85 V_{SS} 20µsec/cm ㉔ 85 V_{SS} 20µsec/cm ㉕ 80 V_{SS} 10µsec/cm ㉖ 80 V_{SS} 10µsec/cm ㉗ 80 V_{SS} 10µsec/cm



Servicestellung
Service position
Posizione di servizio







GRUNDIG
CUC 2400

VERS. A:
GER. MIT NORMAL ROEHRE
SETS WITH NORMAL PICTURE TUBE
APP. CON CINESC. NORMALE

P 42-242 CTI	(25124)
P 42-2421 CTI	(25145)
P 42-2421 GB UHF/VHF TT	(25145)
P 42-2426 GB UHF/VHF TT	(25200)
T 51-240 CTI	(25111)
T 51-2406 GB UHF/VHF TT	(25139)

VERS. B:
GER. MIT RECHTECK ROEHRE U. WUERFELGEH.
SETS WITH FULL SQUARE TUBE AND CUBE CABINET
APP. CON CINESC. RETTANG. E MOBILE A CUBO

P 55-245/9 MULTISYSTEM	(25183)
P 55-245/9 GB UHF/VHF MULTISYSTEM	(25183)

VERS. C:
GER. MIT RECHTECK ROEHRE
SETS WITH FULL SQUARE TUBE
APP. CON CINESC. RETTANG.

(25153)

Sel 85002 25111-906.01

Service am I²C-Bus

Bei Fehlfunktionen des Gerätes, die nicht auf Netzteil, Hochspannung und Ablenkung zurückzuführen sind, ist der I²C-Bus gemäß Tabelle 1 zu prüfen, bevor weitere Servicearbeiten nach Tabelle 2 durchgeführt werden.

Der µComputer in der Bedieneinheit IC 811 liefert Steuerbefehle für Tuner, ZF, Videotext, Scartbuchse (Euro-AV-Buchse) inklusive VCR-Fernsteuerung und RGB-Analogwerte über den I²C Bus.

Hinweis:

Bei Modulwechsel ist das Gerät generell auszuschalten!

Auch in Stellung »Bereitschaft« darf kein Modul gezogen werden! MOS-handling beachten.

Tabelle 1

Messung	Meßwert	Meßpunkt	Mögliche Fehler
+H	5 V	Pin 40, IC 811	D 671, IC 676, IC 811
4 MHz Takt Reset	4 MHz, 3 V_{ss} 5 V_{ss} nur im Einschaltmoment	Pin 22, IC 811 Pin 23	F 811, IC 811 C 806, IC 811
I²C Bus	5 V_{ss}	Pin 8, 9, IC 811	Die I²C-Bus-Daten sind auch ohne TP-Bedienung oder Keyboardeingabe vorhanden. Bei fehlenden Daten: Die Leitungen SDA und SLC (Brücken auf dem Bedienteil) auftrennen. Sind dann die I²C-Bus-Daten vorhanden, liegt eine Überlastung des I²C-Bus vor. **Fehlerursache:** Tuner, ZF, Videotext, IC 350, EURO-AV-Buchse.

Tabelle 2

Mögliche Fehlerarten des Gesamtgerätes in Abhängigkeit der I²C-Bus-Steuerung.

Fehler	Mögliche Ursache	Meßwert	Meßpunkt
Keine Bedienfunktion per Keyboard	+H IC 811	5 V siehe Tabelle 1	IC 811 Pin 40
Keine Kanal-Programmumschaltung mit TP	IR-Vorverstärker D 1201, T 1204, +B,	+B = 12 V	Pin 6 IC 1211
LED schaltet nicht	IC 1211, D 831, +H, IC 811, T 801,	5 V_{ss} (IR-Signal) 5 V_{ss} (Einschaltvorgang)	Pin 3 IC 1211 Pin 8, 9 IC 811
	Wischerschalter der Netztaste, F 811	Übergangswiderstand 0 Ω 3 V_{ss}	am Schalter Pin 22 IC 811
Keine Frequenzabstimmung	+A über R 337 +B, +H Daten (SDA)/Clock (SCL) I²C Bus variable Abstimmspannung in Abhängigkeit der Kanaleingabe	ca. 46 V 12 V, 5 V 5 V_{ss} 0,2 – 30 V	Tuner Stift 1 Tuner Stift 16, 2 Tuner Stift 6, 5 Tuner Stift 13, 15
Kein FBAS-Signal an ZF-Bst. Kont. 7, 9	+B, +B' I²C Bus, SDA, SCL fehlt am Tuner	12 V 5 V_{ss}	ZF 21, 17 Tuner 6, 5
Kein NF-Signal an ZF-Bst. Kont. 28/29	+B, +B' I²C Bus, SDA, SCL keine Koinzidenz	12 V 5 V_{ss} 12 V 5 V	ZF 21, 17 ZF 25, 24 ZF 20 IC 811 Pin 19
Keine Analogwerte	I²C Bus, IC 350	5 V_{ss}	IC 350 Pin 4/5 Farb/RGB-Baustein:
Keine Helligkeit	D/A-Converter	1 – 3 V	Stift 10 (Helligk.)
Kein Kontrast	D/A-Converter	2 – 4 V	Stift 11 (Kontrast)
Kein Farbkontrast	D/A-Converter	2 – 4 V	Stift 12 (Farbkon.)
Nur bei TP-Bedienung Kein Videotext	+B', +E I²C Bus, SDA T 816 ICL	12 V, 8 V 5 V_{ss} 5 V_{ss}	VT 13, 2 VT 9 VT 11
Nur bei TP-Bedienung in Verbindung mit Video 1 Taste			
Keine VCR-Fernsteuerung	T 821, VCL T 816, ICL I²C Bus SDA/T 111	5 V 5 V_{ss} 5 V_{ss}	Euro-AV-Buchse 10 Euro-AV-Buchse 14 Euro-AV-Buchse 12

Service checks on the I²C Bus

If faults occur in the set which cannot be attributed to the power supply unit, the EHT or the deflection system, the I²C bus should be checked using Table 1 before further service work is carried using Table 2.

Via the I²C bus the microcomputer in the control unit IC 811 supplies control signals for the tuner, IF, Videotext (Teletext), Scart socket (Euro AV socket) including the VCR remote control, and the RGB analog signals.

Note:

N.B. when a module is being changed, the set should be switched off completely. Modules must not be unplugged even in the "standby" mode. Observe MOS handling precautions.

Table 1

Test	Test Figures	Test Point	Possible Faults
+H	5 V	Pin 40, IC 811	D 671, IC 676, IC 811
4 MHz clock Reset	4 MHz, 3 V_{pp} 5 V_{pp} only at moment of switch on	Pin 22, IC 811 Pin 23	F 811, IC 811 C 806, IC 811
I²C Bus	5 V_{pp}	Pin 8, 9, IC 811	The I²C Bus data are present even without input from the remote control or keyboard. If data are absent, disconnect the SDA and SLC lines (links on control section). If data are then present on the I²C Bus, the I²C Bus is overloaded. **Possible Faults:** Tuner, IF, Videotext (Teletext), Scart socket, IC 350

Table 2

Possible faults due to I²C Bus control which can occur in any part of set.

Fault	Possible Cause	Test Figure	Test Point
No functions accepted by keyboard	+H IC 811	5 V see Table 1	Pin 40, IC 811
Channel No. cannot be changed with remote control	IR preamplifier D 1201, T 1204, +B,	+B = 12 V	Pin 6, IC 1211
LED does not switch	IC 1211, D 831, +H IC 811, T 801	5 V_{pp} (IR signal) 5 V_{pp} (switch-on cycle)	Pin 3, IC 1211 Pins 8, 9, IC 811
	Wiper switch of mains button F 811	Contact resistance 0 ohm 3 V_{pp}	at switch Pin 22, IC 811
No frequency tuning	+A via R 337 +B, +H Data (SDA)/clock (SCL) I²C Bus Variation of tuning voltage as function of channel selection	approx. 46 V 12 V, 5 V 5 V_{pp} 0.2 – 30 V	Tuner, pin 1 Tuner, pins 16, 2 Tuner, pins 6, 5 Tuner, pins 13, 15
No CCVS at IF module contacts 7, 9	+B, +B' I²C Bus, SDA, SCL absent at tuner	12 V 5 V_{pp}	IF, pins 21, 17 Tuner, pins 6, 5
No AF signal at IF module contacts 28/29	+B, +B' I²C Bus, SDA, SCL no coincidence	12 V 5 V_{pp} 12 V 5 V	IF, pins 21, 17 IF, pins 25, 24 IF, pin 20 IC 811, pin 19
No analog singals	I²C Bus, IC 350	5 V_{pp}	IC 350, pin 4, 5 Colour/RGB module:
Brightness	D/A convertor	1 – 3 V	pin 10 (brightness)
Contrast	D/A convertor	2 – 4 V	pin 11 (contrast)
Colour contrast	D/A convertor	2 – 4 V	pin 12 (colour)
Remote control operation only			
No Videotext (Teletext)	+B', +E I²C bus, SDA T 816 ICL	12 V, 8 V 5 V_{pp} 5 V_{pp}	VT, pin 13, 2 VT, pin 9 VT, pin 11
Remote control operation involving video 1 button only			
No VCR remote control	T 821, VCL T 816, ICL I²C bus SDA/T 111	5 V_{pp} 5 V_{pp} 5 V_{pp}	Euro AV socket, pin 10 Euro AV socket, pin 14 Euro AV socket, pin 12

Servizio assistenza al bus I²C

Se l'apparecchio svolge erratamente le funzioni, e questo non dipende ne
ne o dalla deflessione, controllare allora il bus I²C secondo la tabella 1, prin
stenza indicati in tabella 2.

Il microcomputer nell'unità di comando IC 811 fornisce attraverso il bus I²C
televideo, presa Euro/Scart, compreso telecomando VCR e valori analog

Nota:

Spegnere l'apparecchio quando un modulo viene sostituito! La sostituzio
nemmeno in posizione d'attesa (stand-by). Attenzione alle norme MOS!

Tabella 1

Misura	Valore di misura	Punto di misura	Gu
+H	5 V	Pin 40, IC 811	D 6
Cadenza 4 MHz Reset	4 MHz, 3 V_{pp} 5 V_{pp} solo in accensione	Pin 22, IC 811 Pin 23	F 8 C 8
Bus I²C	5 V_{pp}	Pin 8, 9, IC 811	I da anc mis Se line zion I²C sen Gu tun IC 3

Tabella 2

Tipi di guasto possibili nell'apparecchio completo in funzione del coman

Guasto	Causa possibile	Valore di misura
Nessuna funzione di comando tramite tastiera	+H IC 811	5 V vedi tabella 1
Nessuna commutazione canale/programma tramite TP	Preamplif. ad infrarossi D 1204, +B	+B = 12 V
Il LED non commuta	IC 1211, D 831, +H, IC 811, T 801,	5 V_{pp} (segnale all 5 V_{pp} (fase di acce
	Contatto temporaneo dell'interruttore di rete F 811	Resistenza di co 0 Ohm 3 V_{pp}
Nessuna sintonia della frequenza	+A tramite R 337 +B, +H dati (SDA)/clock (SCL) del bus I²C tensione di sintonia variabile a seconda dell'immissione di canale	ca. 46 V 12 V, 5 V 5 V_{pp} 0,2 – 30 V
Nessun segnale FBAS al modulo FI cont. 7, 9	+B, +B' bus I²C, SDA, SCL manca al tuner	12 V 5 V_{pp}
Nessun segnale BF al modulo FI cont. 28/29	+B, +B' bus I²C, SDA, SCL nessuna coincidenza	12 V 5 V_{pp} 12 V 5 V
Nessun valore analogico	bus I²C, IC 350	5 V_{pp}
luminosità	convertitore D/A	1 – 3 V
contrasto	convertitore D/A	2 – 4 V
contrasto colore	convertitore D/A	2 – 4 V
Solo con comando TP		
Manca la funzione Televideo	+B', +E bus I²C, SDA T 816 ICL	12 V, 8 V 5 V_{pp} 5 V_{pp}
Solo con comando TP assieme al tasto video 1		
Telecomando VCR non possibile	T 821, VCL T 816, ICL bus I²C SDA/T 111	5 V_{pp} 5 V_{pp} 5 V_{pp}

questo non dipende nè dall'alimentatore, nè dall'alta tensio-
secondo la tabella 1, prima di effettuare gli altri lavori di assi-

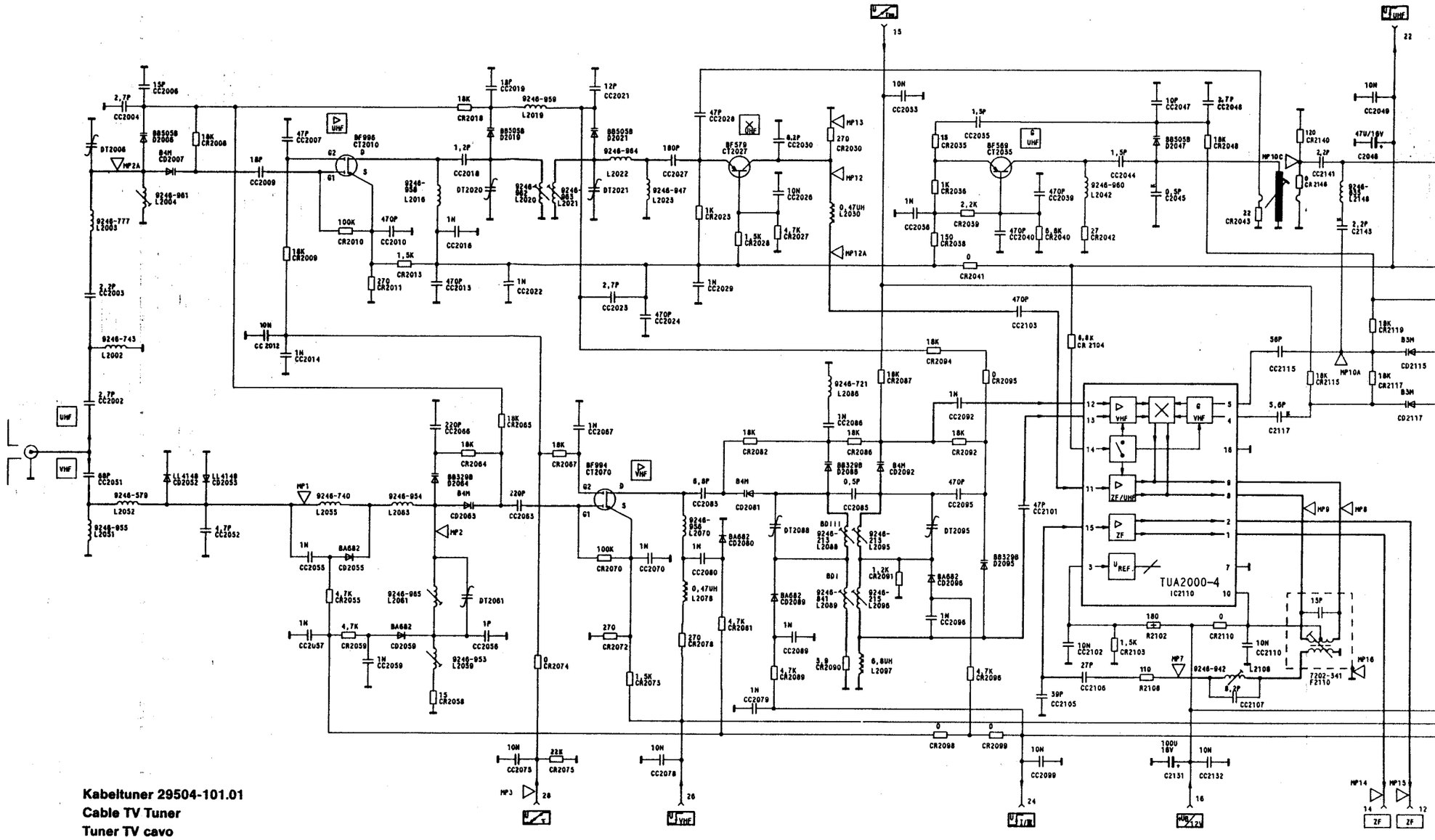
nisce attraverso il bus I²C, gli ordini di comando per tuner, FI,
ndo VCR e valori analogici per RGB.

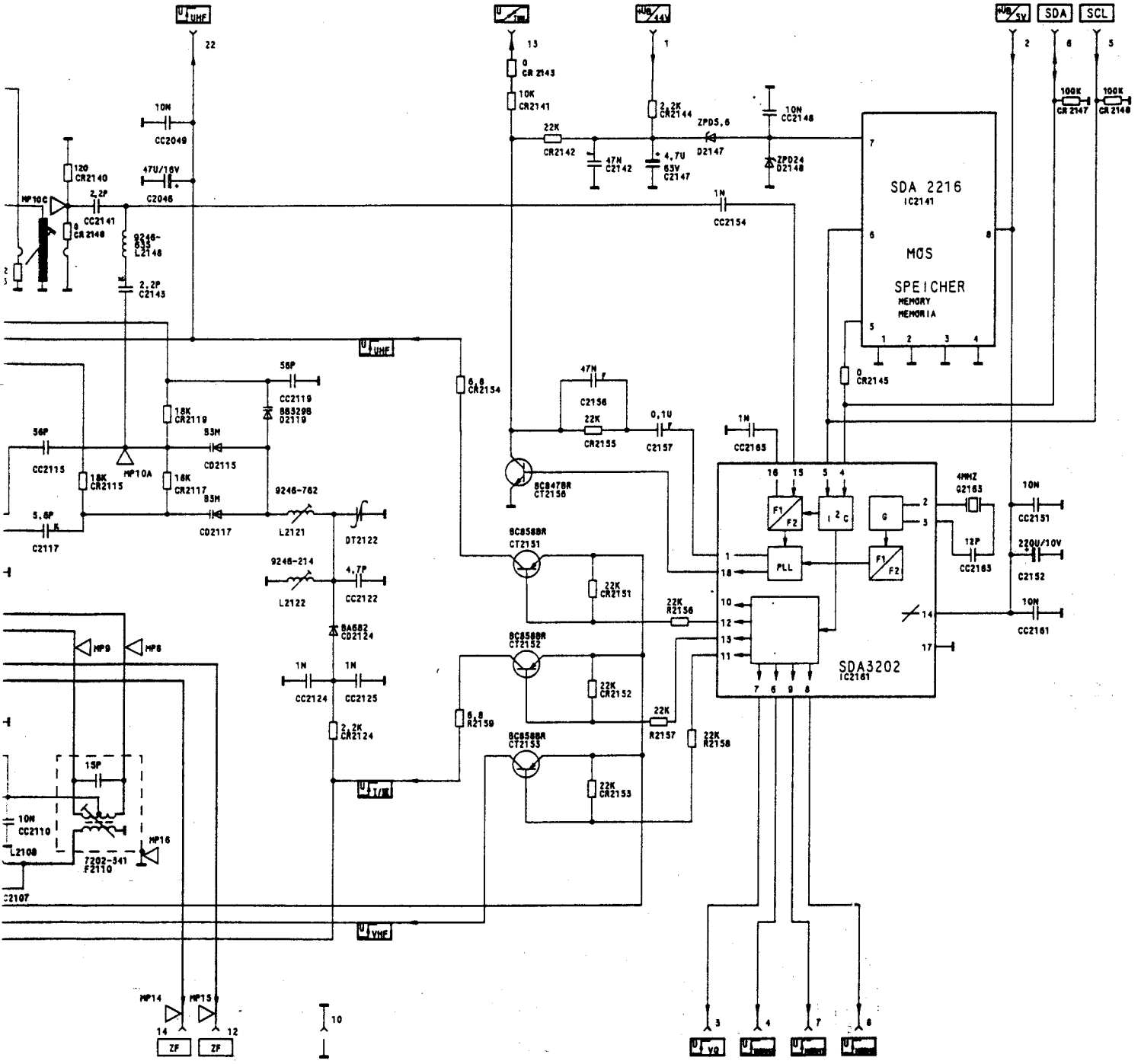
e sostituito! La sostituzione di un modulo non può avvenire
zione alle norme MOS!

nto di misura	Guasto possibile
n 40, IC 811	D 671, IC 676, IC 811
n 22, IC 811 n 23	F 811, IC 811 C 806, IC 811
n 8, 9, IC 811	I dati nel bus I²C sono presenti anche senza comando TP o immissione tramite tastiera. Se i dati mancano: Interrompere le linee SDA e SLC (ponticelli sulla sezione di comando). Se i dati nel bus I²C sono poi disponibili, allora è presente un sovraccarico. **Guasto possibile:** tuner, FI, televideo, presa Scart, IC 350.

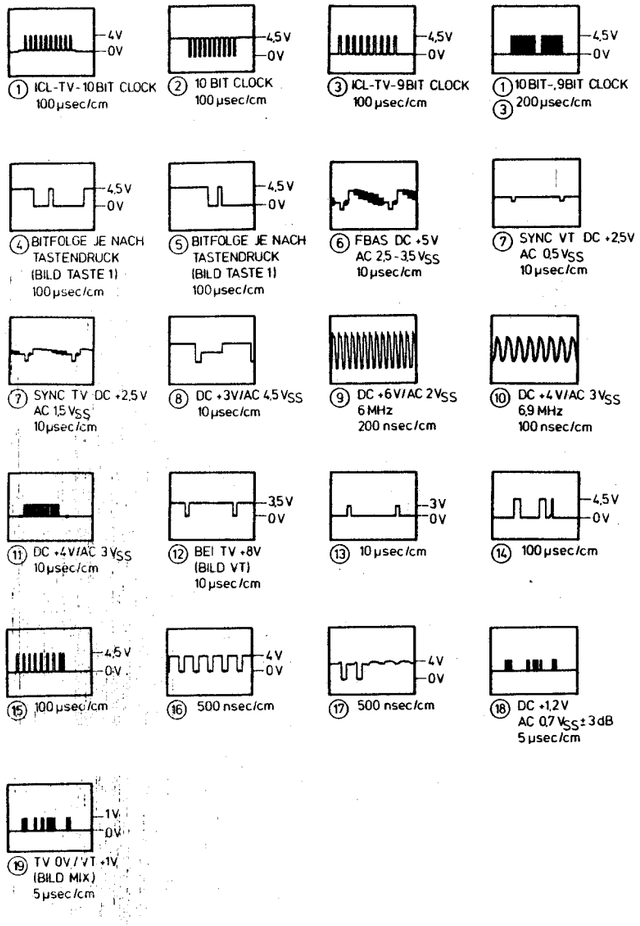
in funzione del comando bus I²C.

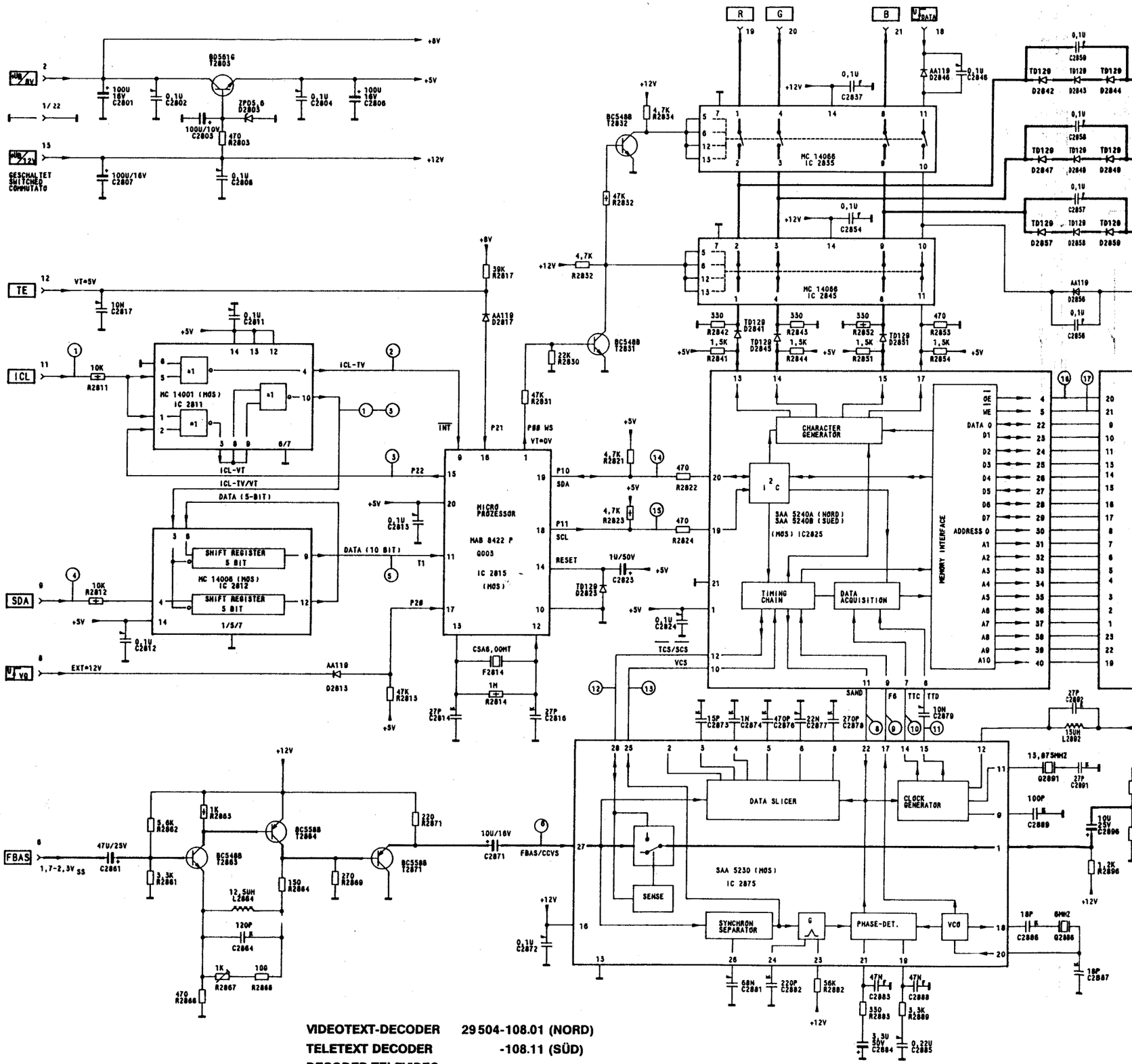
	Valore di misura	Punto di misura
	5 V vedi tabella 1	IC 811 pin 40
si	+B = 12 V 5 V_{pp} (segnale all'infrar.) 5 V_{pp} (fase di accensione)	Pin 6 IC 1211 Pin 3 IC 1211 Pin 8, 9 IC 811
e	Resistenza di contatto 0 Ohm 3 V_{pp}	sul contatto Pin 22 IC 811
-)	ca. 46 V 12 V, 5 V 5 V_{pp}	Tuner spinotto 1 Tuner spinotto 16, 2 Tuner spinotto 6, 5
a-	0,2 – 30 V	Tuner spinotto 13, 15
	12 V 5 V_{pp}	FI 21, 17 Tuner 6, 5
	12 V 5 V_{pp} 12 V 5 V	FI 21, 12 FI 25, 24 FI 20 IC 811 pin 19
	5 V_{pp} 1 – 3 V 2 – 4 V 2 – 4 V	IC 350 pin 4/5 modulo colore/RGB: spinotto 10 (luminosità) spinotto 11 (contrasto) spinotto 12 (contr. colore)
	12 V, 8 V 5 V_{pp} 5 V_{pp}	VT 13, 2 VT 9 VT 11
	5 V_{pp} 5 V_{pp} 5 V_{pp}	Presa Euro/Scart 10 Presa Euro/Scart 14 Presa Euro/Scart 12





Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto





VIDEOTEXT-DECODER 29504-108.01 (NORD)
TELETEXT DECODER -108.11 (SÜD)
DECODER TELEVIDEO

VIDEOTEXT-DECODER 29504-108.01 (NORD)
TELETEXT DECODER -108.11 (SÜD)
DECODER TELEVIDEO

Anpassungsabgleich der Steckkarte

Während des Abgleiches ist es notwendig, die Seite 199 ständig neu anzuwählen, da nur so die Seite neu eingelesen wird und eine Beurteilung der Fehlerschwelle möglich ist.

Der Einsteller R 2867 steht bei Auslieferung auf Linksanschlag (kleinste Höhenanhebung, ca. 2 dB). Treten trotz einwandfreiem Antennensignal Zeichenfehler auf, R 2867 langsam nach rechts verstellen, bis Fehler verschwinden. Nicht weiterdrehen, da Fehlerhäufigkeit wieder zunehmen kann.

Matching adjustment of the plug-in board

Page 199 must always be selected anew during the adjustment, as only this effects a new read-in of the page making it possible to evaluate the error level.

The control R 2867 is set in the fully anticlockwise position when the unit is delivered (smallest treble boost: approx. 2 dB). If, with a perfect aerial signal character faults occur, turn R 2867 slowly clockwise until the faults disappear. Do not turn R 2867 up any further as error rate may increase again.

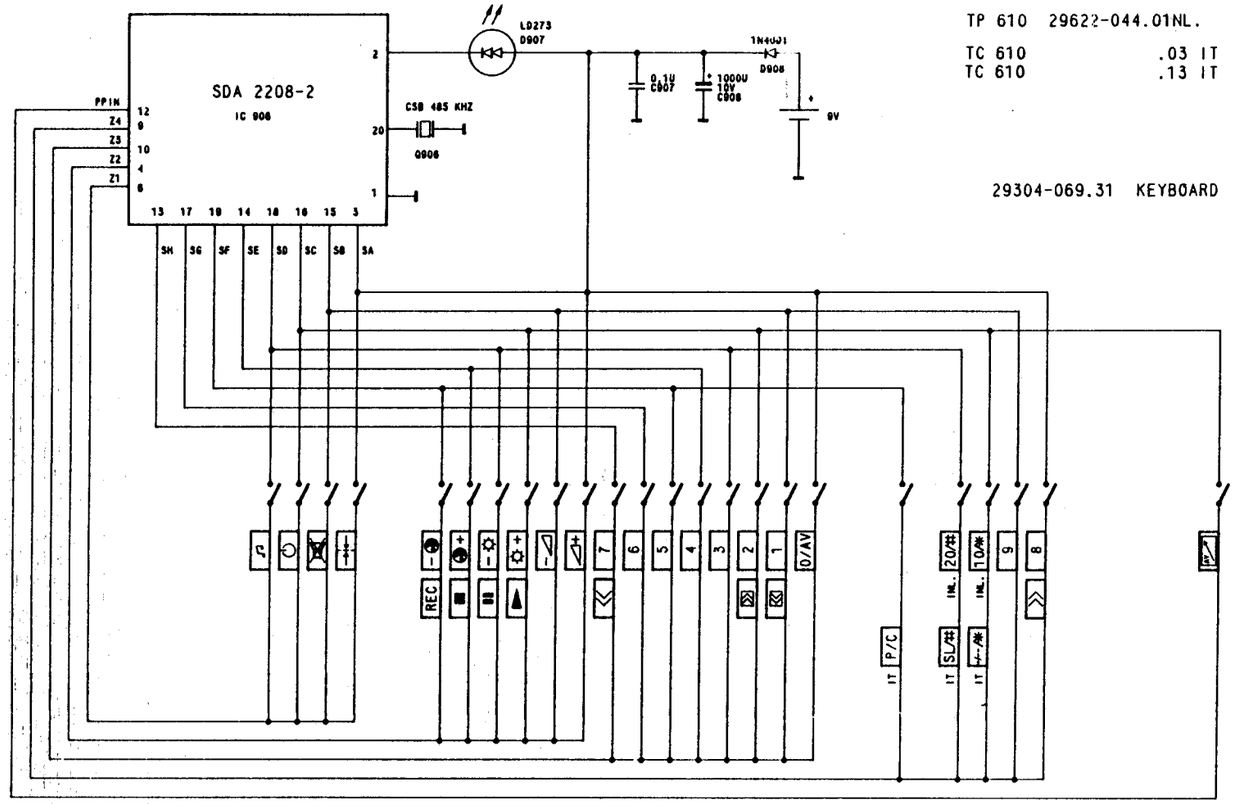
Taratura d'adattamento della scheda ad innesto

Durante la taratura è necessario selezionare ripetutamente la pagina 199, poiché solo così è possibile una nuova immissione della pagina ed una valutazione della soglia degli errori.

Il regolatore R 2867 viene fornito col cursore girato completamente all'estrema sinistra (minima esaltazione delle alte frequenze, ca. 2 dB). Se si manifestano errori di carattere, nonostante un perfetto segnale d'antenna, girare lentamente il cursore di R 2867 verso destra fino ad eliminare gli errori. Non girarlo oltre poiché può riaumentare la presenza degli errori.

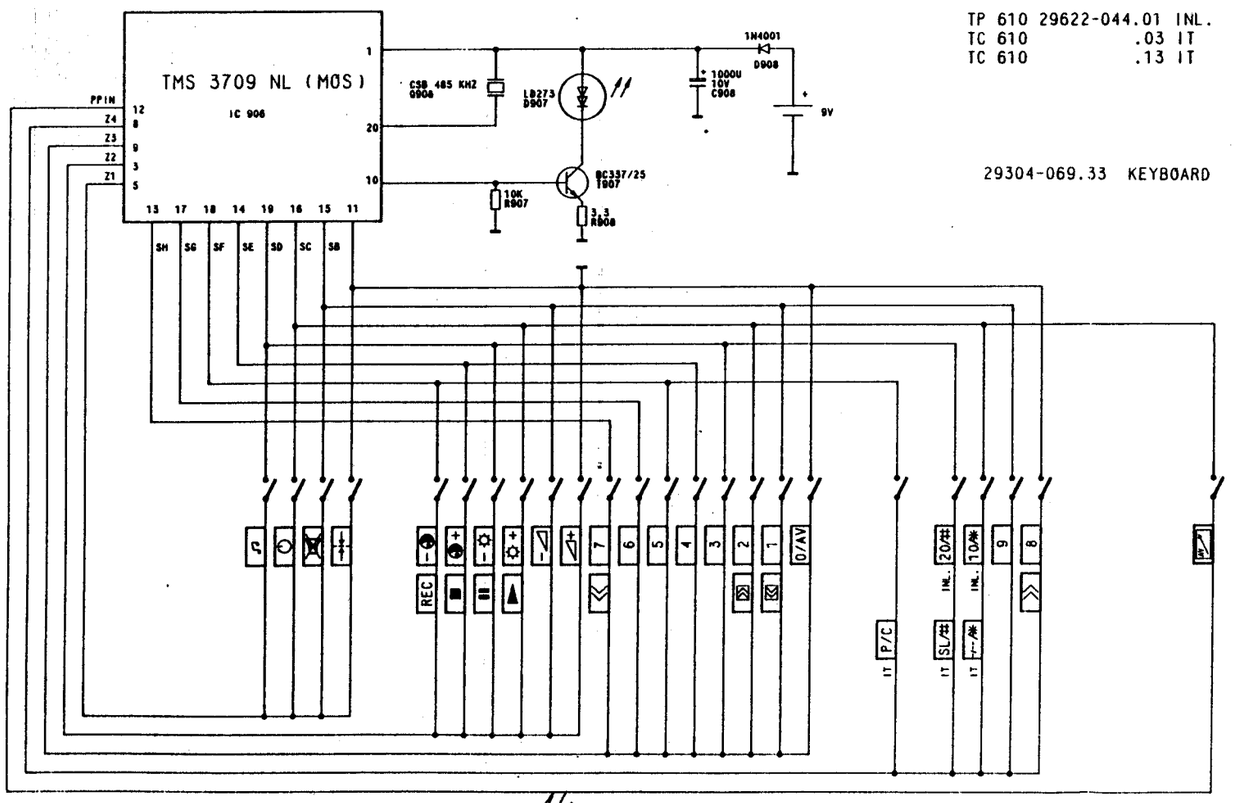
TP 610 29622-044.01NL.
TC 610 .03 IT
TC 610 .13 IT

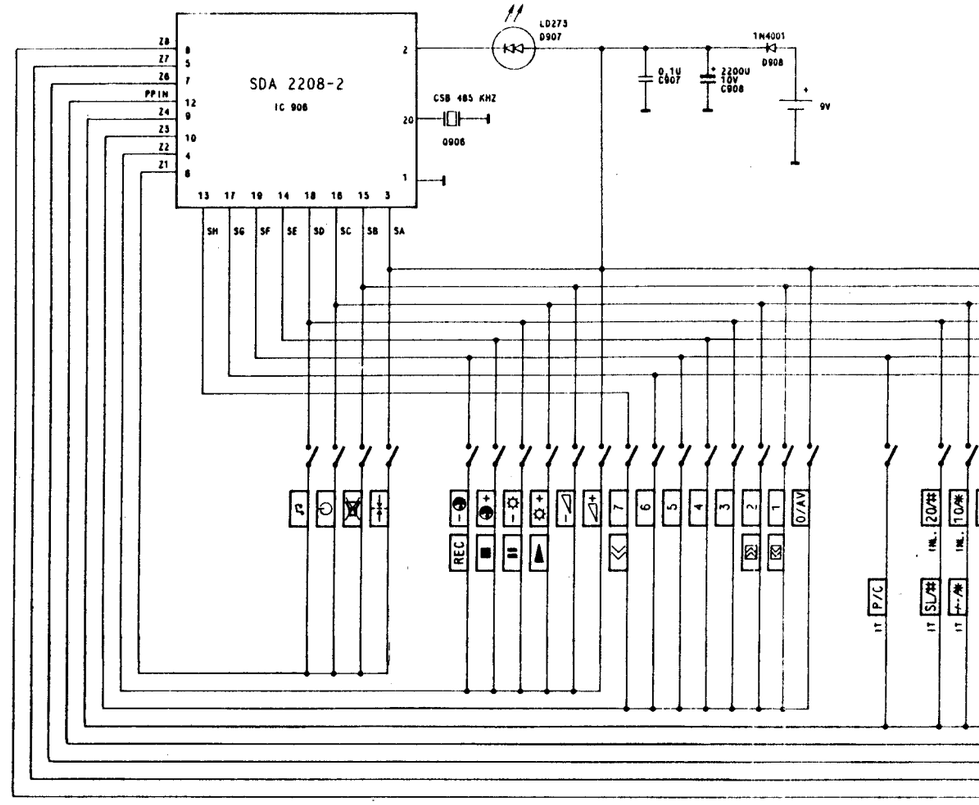
29304-069.31 KEYBOARD

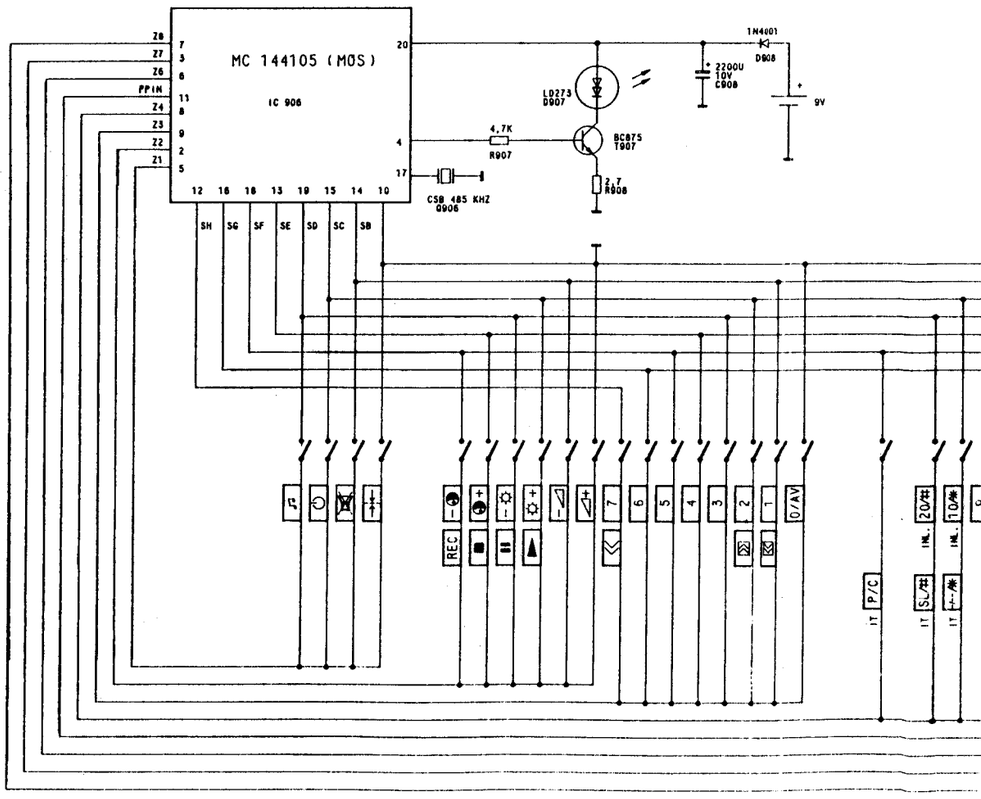


TP 610 29622-044.01 INL.
TC 610 .03 IT
TC 610 .13 IT

29304-069.33 KEYBOARD

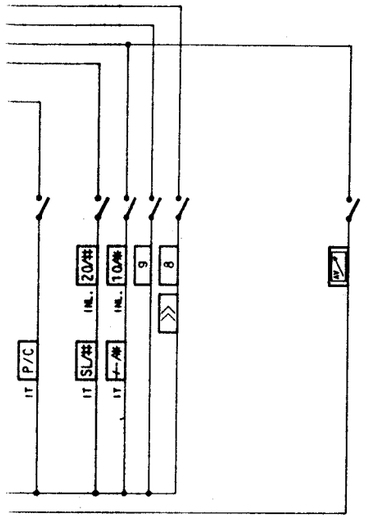


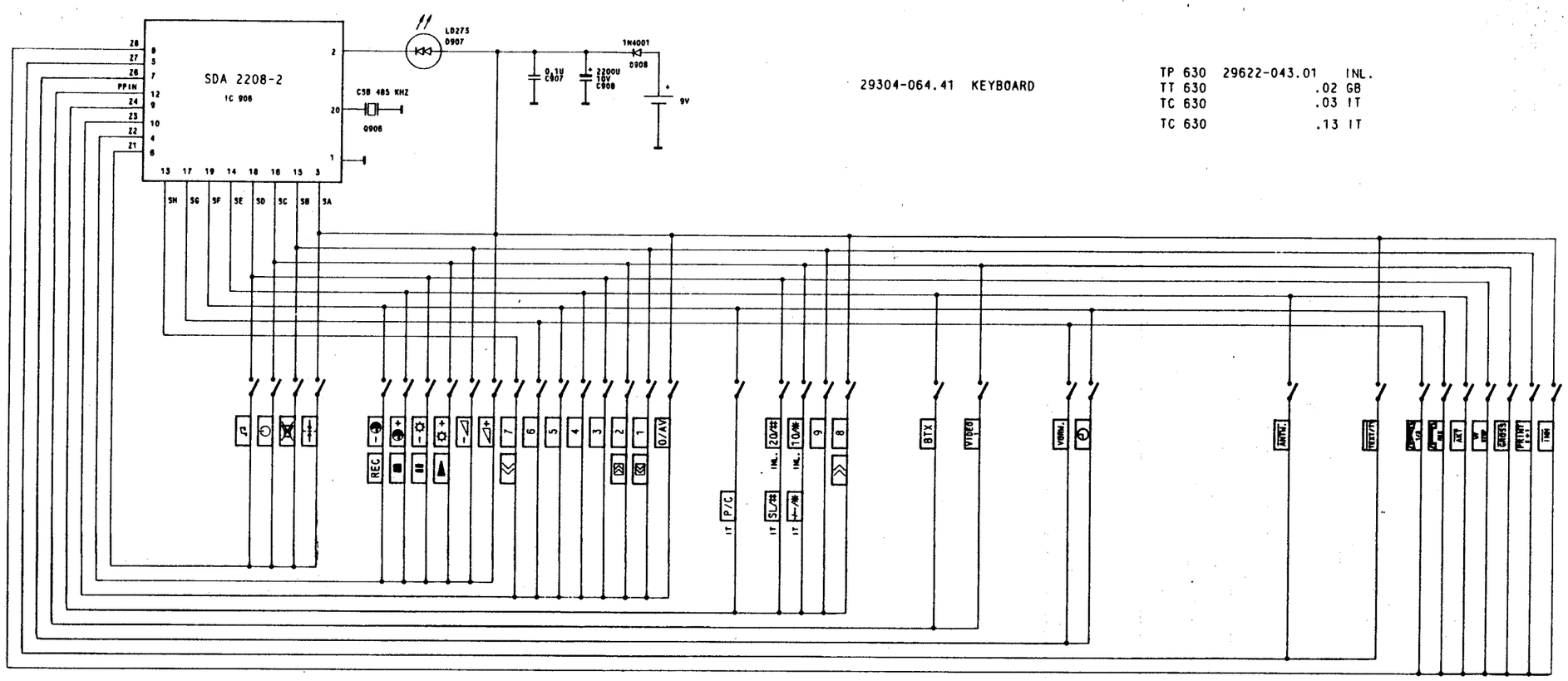




TP 610 29622-044.01NL.
TC 610 .03 IT
TC 610 .13 IT

29304-069.31 KEYBOARD



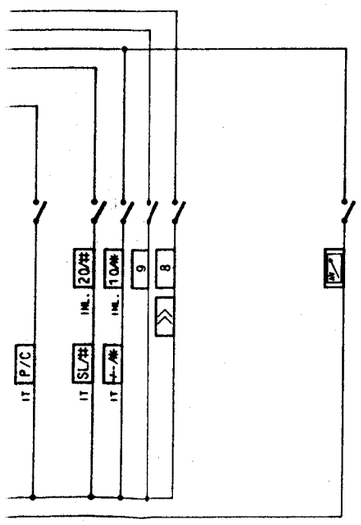


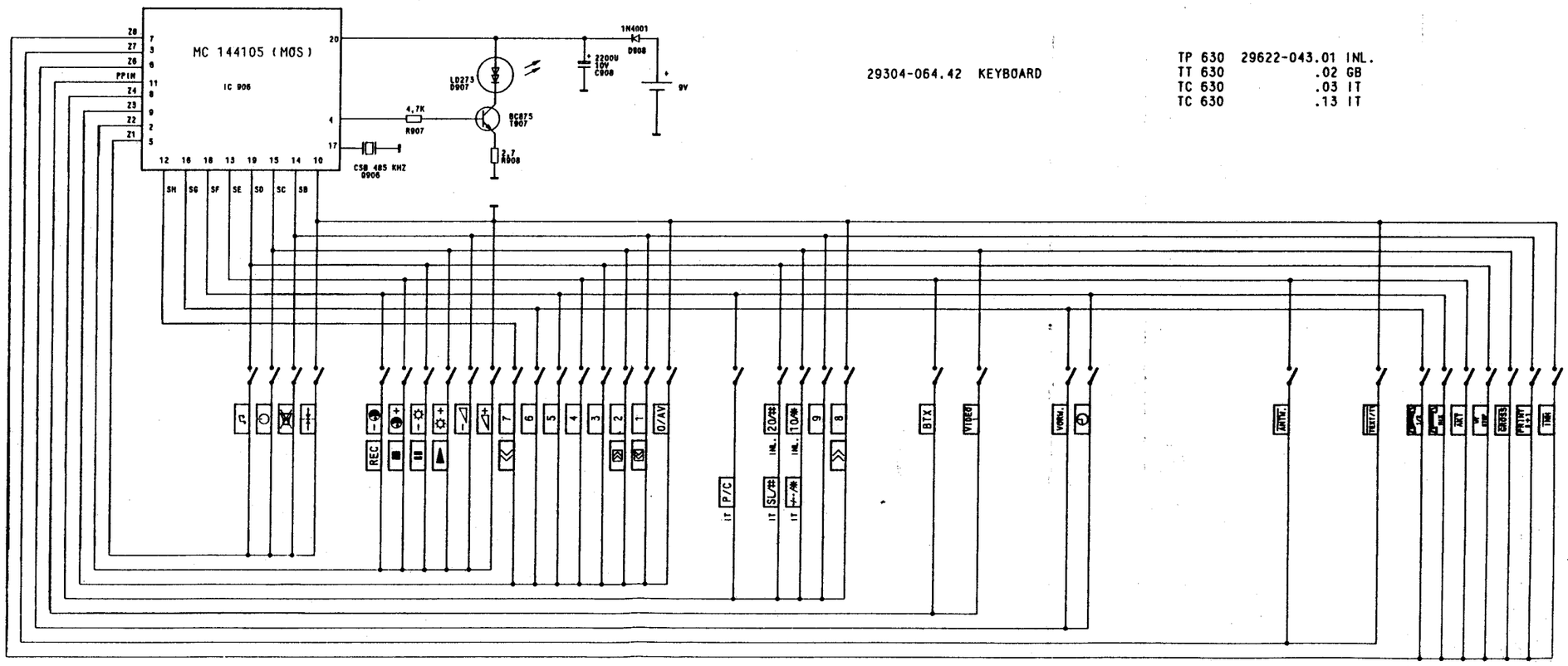
29304-064.41 KEYBOARD

TP 630 29622-043.01 INL.
TT 630 .02 GB
TC 630 .03 IT
TC 630 .13 IT

TP 610 29622-044.01 INL.
TC 610 .03 IT
TC 610 .13 IT

29304-069.33 KEYBOARD

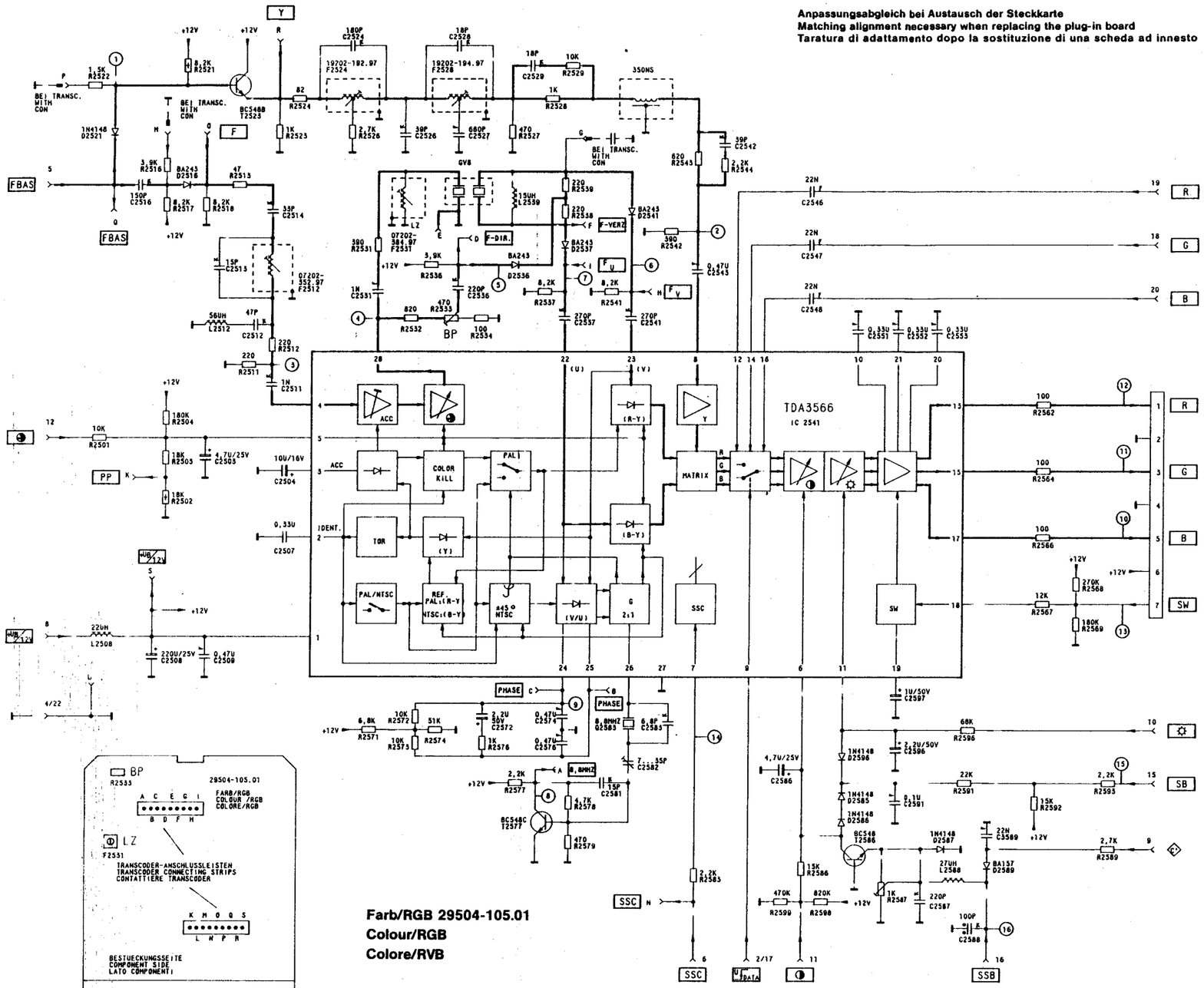




29304-064.42 KEYBOARD

TP 630 29622-043.01 INL.
TT 630 .02 GB
TC 630 .03 IT
TC 630 .13 IT

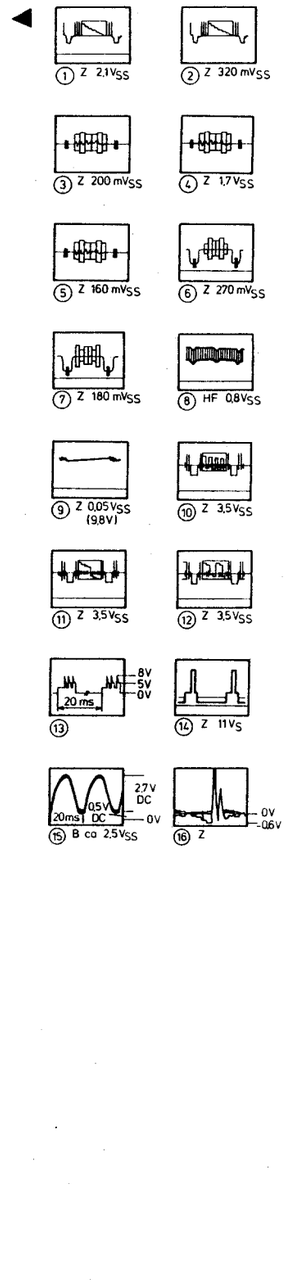
Anpassungsabgleich bei Austausch der Steckkarte
Matching alignment necessary when replacing the plug-in board
Taratura di adattamento dopo la sostituzione di una scheda ad innesto

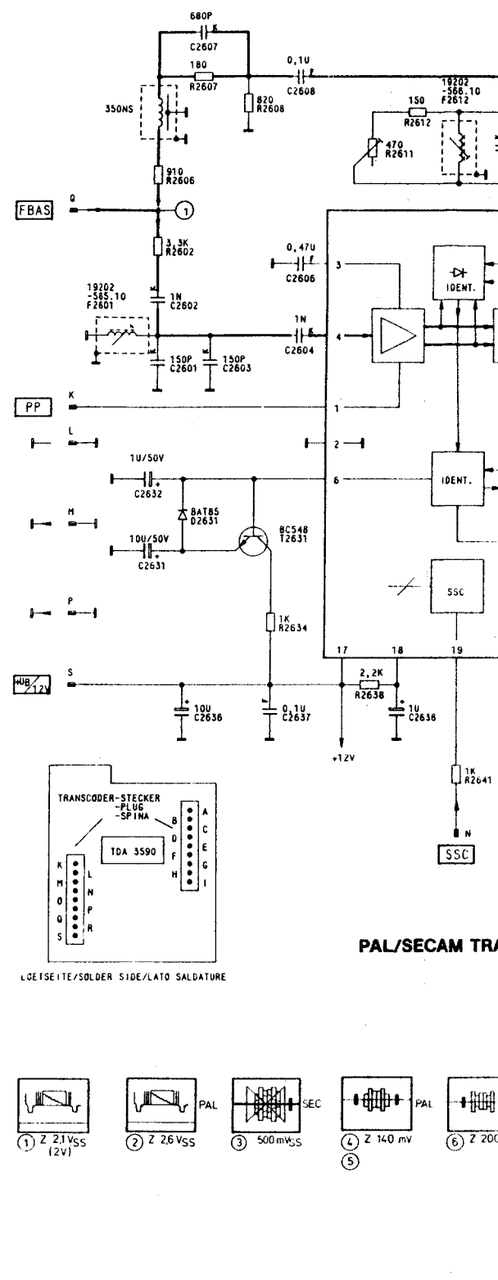


1. Weißabgleich
   - FuBK-Testbild einspeisen.
   - ◑min., ○nom., ◑max., einstellen.
   - Regler VR und VB (Bildrohrplatte) so einstellen, daß keine Verfärbungen in den Grauwerten sichtbar sind.
2. Sperrpunktabgleich
   Eine manuelle Einstellung ist nicht möglich, da die Steckkarte eine automatische Dunkelstromregelung besitzt. Kontrolle des Sperrpunkts (Oszilloskop erforderlich).
   - FuBK-Testbild einspeisen.
   - ◑min., ○nom., ◑min., einstellen.
   - Tastkopf an den Kollektoren der Transistoren T736, T756, T776 anhängen (Bildrohrplatte). Die Schwarzwerte der drei Kathodensignale liegen bei ca. 140 ... 150 V.
3. Einstellungen im Farbkanal
   - FuBK-Testbild einspeisen.
   - ◑nom., ○nom., ◑nom. einstellen.
   - Am IC TDA 3566 Pin 1 mit Pin 5 und Pin 24 mit Pin 25 kurzschließen.
   - Mit Trimmer 2582 die durchlaufenden Farbbalken zum Stehen bringen, Kurzschlußbrücken entfernen.
   - Tastkopf am Pin 17 des IC TDA 3566 einhängen.
     Mit Regler BP und Spule LZ die Doppelbilder des B-Signals zur Deckung bringen.

1. White level adjustment.
   - Display colour bar test pattern.
   - Set ◑ to min., ○ to nom., ◑ to max.
   - Adjust presets VR and VB (CRT socket board) so that the picture does not show any colouration.
2. Adjustment of cut-off point.
   Manual adjustment is not possible, as the circuit board employs an automatic dark current control circuit.
   To check cut-off point (oscilloscope required), proceed as follows:
   - Display colour bar test pattern.
   - Set ◑ to min., ○ to nom., ◑ to min.
   - Connect test probe to collectors of T736, T756, T776 (CRT socket board). The black levels of the three cathode signals should be 140-150 V.
3. Colour oscillator and PAL adjustments.
   - Inject colour bar test pattern.
   - Adjust to ◑, ○, ◑ suit view conditions.
   - On the IC TDA 3566, short circuit pin 1 with pin 5 and pin 24 with 25.
   - With trimmer 2582 adjust the until colours are correct. Remove short circuits.
   - Attach probe to pin 17 of the IC TDA 3566.
   - With control BP and coil LZ, adjust the double images of the B signal to coincide.

1. Taratura del bianco
   - Applicare un monoscopio FuBK
   - Regolare ◑ al minimo, ○ sul valore nominale e ◑ al massimo.
   - Con VR e VB (piastra cinescopio) eliminare eventuali macchie di colore.
2. Taratura del punto di blocco.
   Una regolazione manuale non è possibile, poiché questa scheda incorpora una regolazione automatica della corrente d'interdizione.
   Controllo del punto di blocco (è necessario un oscilloscopio):
   - Applicare un monoscopio FuBK.
   - Regolare ◑ al minimo, ○ sul valore nominale e ◑ al minimo.
   - Collegare la sonda ai collettori dei transistori T736, T756, T776 (piastra cinescopio). Valore nero dei tre segnali catodici ca. 140...150 V.
3. Regolazioni dell'oscillatore colore e PAL
   - Applicare un monoscopio FuBK.
   - Regolare ◑, ○ ed ◑ sul valore nominale.
   - Cortocircuitare i terminali 1 e 5 ed i terminali 24 e 25 dell'IC TDA 3566.
   - Fermare le barre colorate scorrevoli con il trimmer 2582 e togliere i cortocircuiti.
   - Collegare la sonda dell'oscilloscopio al terminale 17 dell'IC TDA 3566. Con il regolatore BP e la bobina LZ portare a copertura le immagini doppie del segnale B.

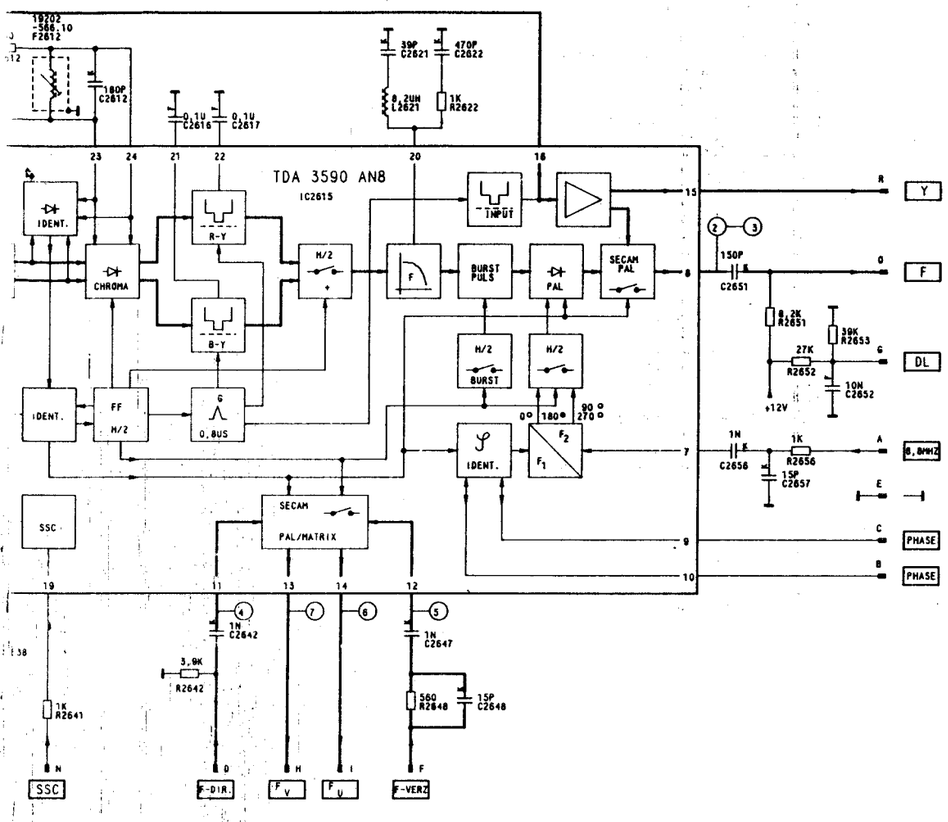




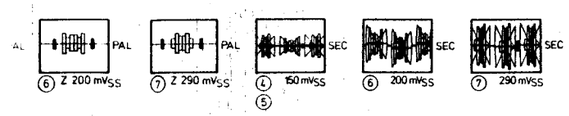
Wird die FARB/RGB-Steckkarte 29504-105.01 durch de
SECAM nachgerüstet ist kein zusätzlicher Abgleich not

If the colour/RGB board 29504-105.01 is converted fo
29504-146.01, no additional alignment is necessary.

Se la scheda colore/RGB 29504-105.01 viene trasforma
29504-146.01, non occorre effettuare nessun'altra tarat



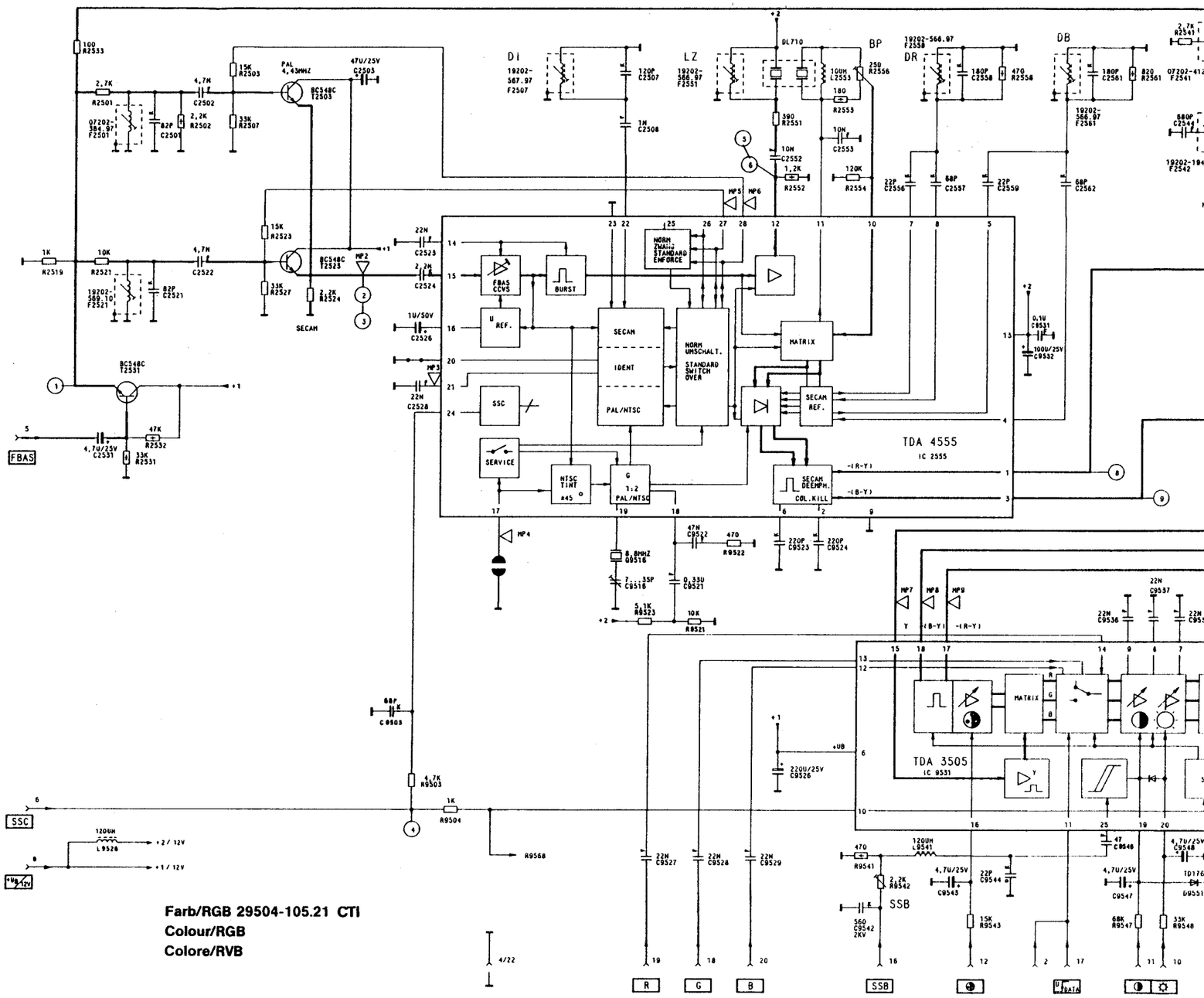
ECAM TRANSCODER 29504-146.01



durch den PAL/SECAM-Transcoder 29504-146.01 auf gleich notwendig.

nverted for SECAM with the PAL/SECAM Transcoder essary.

trasformata in SECAM con il transcoder PAL/SECAM altra taratura.

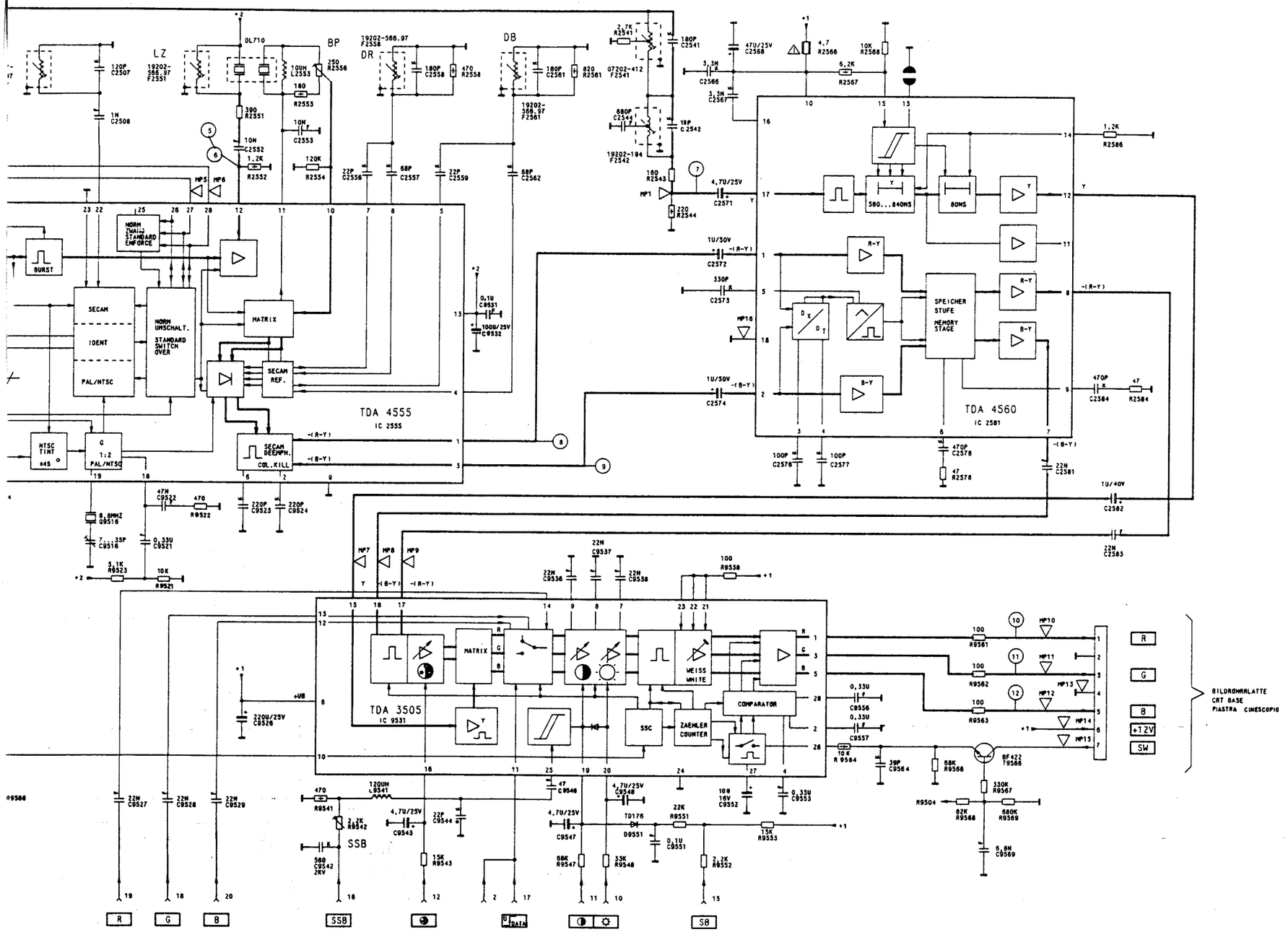


Farb/RGB 29504-105.21 CTI
Colour/RGB
Colore/RVB

1. Weißabgleich
   - FuBK-Testbild einspeisen.
   - ◑min., ◯nom., ◑max., einstellen.
   - Regler VR und VB (Bildrohrplatte) so einstellen, daß keine Verfärbungen in den Grauwerten sichtbar sind.
2. Sperrpunktabgleich
   Eine manuelle Einstellung ist nicht möglich, da die Steckkarte eine automatische Dunkelstromregelung besitzt. Kontrolle des Sperrpunkts (Oszilloskop erforderlich).
   - FuBK-Testbild einspeisen.
   - ◑min., ◯nom., ◑min., einstellen.
   - Tastkopf an den Kollektoren der Transistoren T736, T756, T776 anhängen (Bildrohrplatte). Die Schwarzwerte der drei Kathodensignale liegen bei ca. 140 ... 150 V.
3. Einstellungen im Farbkanal
   - PAL-Testbild einspeisen.
   - FK nom., H nom., K max. einstellen.
   - IC-Pin 28 vom TDA 4555 mit + 12 V verbinden.
   - IC-Pin 17 vom TDA 4555 mit Masse verbinden.
   - Mit Trimmer C 9516 die durchlaufenden Farbbalken zum Stehen bringen.
   - Kurzschlußbrücken entfernen.
   - Tastkopf an MP 12, mit Regler BP und Spule LZ die Doppelbilder des B -Signals zur Deckung bringen.
   - SECAM-Testbild einspeisen.
   - Tastkopf an Pin 1 vom TDA 4555 anschließen, mit Spule DR Nullinie des (R-Y)-Signals auf Zeilentastniveau bringen.
   - Tastkopf an Pin 3 vom TDA 4555 anschließen, mit Spule DB Nullinie des (B-Y)-Signals auf Zeilentastniveau bringen.
   - Spule F 2521 so einstellen, daß das (B-Y)-Signal keine Überschwinger hat.

1. White level adjustment.
   - Display colour bar test pattern.
   - Set ◑ to min., ◯ to nom., ◑ to max.
   - Adjust presets VR and VB (CRT socket board) so that the picture does not show any colouration.
2. Adjustment of cut-off point.
   Manual adjustment is not possible, as the circuit board employs an automatic dark current control circuit.
   To check cut-off point (oscilloscope required), proceed as follows:
   - Display colour bar test pattern.
   - Set ◑ to min., ◯ to nom., ◑ to min.
   - Connect test probe to collectors of T 736, T 756, T 776 (CRT socket board). The black levels of the three cathode signals should be 140 - 150 V.
3. Adjustments in chroma channel.
   - Display PAL test pattern.
   - Adjust colour level and brightness to nominal value, contrast to maximum.
   - Connect pin 28 of IC TDA 4555 to + 12 V supply.
   - Connect pin 17 to IC TDA 4555 to chassis. Adjust trimmer C 9516 for stationary pattern in colour bars.
   - Remove wire links.
   - Connect test probe to test point MP 12. Bring the double image produced by the B signal to coincidence by adjusting the preset BP and the coil LZ.
   - Display SECAM test pattern.
   - Connect test probe to pin 1 of IC TDA 4555.
   - Use coil DR to align zero level of the (R-Y) signal with the line black level.
   - Connect test probe to pin 3 of IC TDA 4555.
   - With coil DB to align zero level of the (B-Y) signal with the line black level.
   - Adjust coil F 2521 so that the (B-Y) signal is free of overshooting.

1. Taratura del bianco
   - Applicare un monoscopio FuBK
   - Regolare ◑ al minimo, ◯ sul valore nominale e ◑ al massimo.
   - Con VR e VB (piastra cinescopio) eliminare eventuali macchie di colore.
2. Taratura del punto di blocco.
   Una regolazione manuale non è possibile, poichè questa scheda incorpora una regolazione automatica della corrente d'interdizione.
   Controllo del punto di blocco (è necessario un oscilloscopio):
   - Applicare un monoscopio FuBK.
   - Regolare ◑ al minimo, ◯ sul valore nominale e ◑ al minimo.
   - Collegare la sonda ai collettori dei transistori T736, T756, T776 (piastra cinescopio). Valore nero dei tre segnali catodici ca. 140...150 V.
3. Regolazione del canale colore.
   - Applicare un monoscopio PAL.
   - Regolare FK e H sul valore nominale, K al massimo.
   - Sull'integrato TDA 4555 collegare pin 28 a + 12 V.
   - Sull'integrato TDA 4555 collegare pin 17 a massa. Con C 9516 fermare le barre colorate scorrevoli.
   - Togliere i cortocircuiti.
   - Collegare la sonda a MP 12, con il regolatore BP e la bobina LZ portare a copertura le immagini doppie del segnale B .
   - Applicare un monoscopio SECAM.
   - Collegare la sonda al pin 1 dell'integrato TDA 4555, con la bobina DR portare la linea zero del segnale (R-Y) sul livello della frequenza di riga.
   - Collegare la sonda al pin 3 dell'integrato TDA 4555, con la bobina DB portare la linea zero del segnale (B-Y) sul livello della frequenza di riga.
   - La bobina F 2521 applicarla così in modo che il segnale (B-Y) sia chiaro.



st pattern.
nom., ◑ to max.
d VB (CRT socket board) so that the picture does not show any

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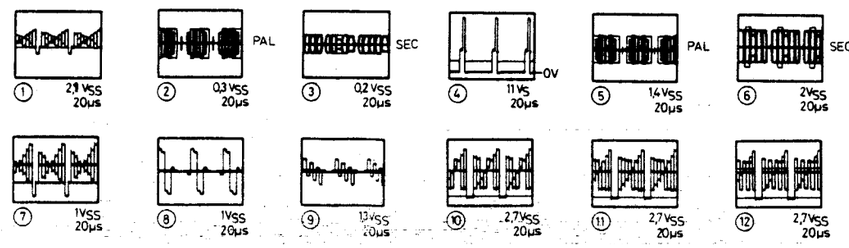
ot possible, as the circuit board employs an automatic dark

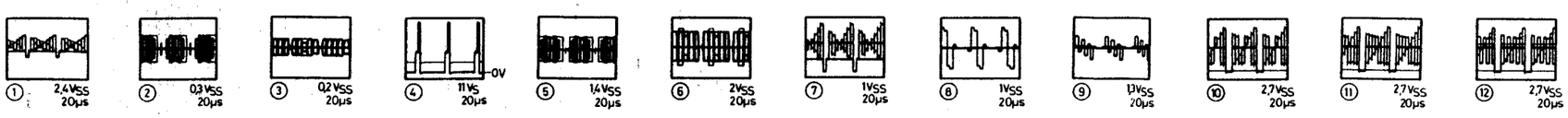
oscilloscope required), proceed as follows:
st pattern.
nom., ◑ to min.
o collectors of T736, T756, T776 (CRT socket board).
he three cathode signals should be 140-150 V.
channel.
ern.
nd brightness to nominal value, contrast to maximum.
TDA 4555 to + 12 V supply.
TDA 4555 to chassis.
6 for stationary pattern in colour bars.

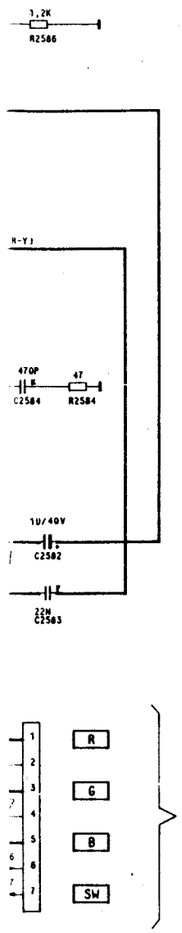
o test point MP 12. Bring the double image produced by the
nce by adjusting the preset BP and the coil LZ.
pattern.
o pin 1 of IC TDA 4555.
zero level of the (R-Y) signal with the line black level.
o pin 3 of IC TDA 4555.
zero level of the (B-Y) signal with the line black level.
that the (B-Y) signal is free of overshooting.

1. Taratura del bianco
   - Applicare un monoscopio FuBK
   - Regolare ◑ al minimo, ○ sul valore nominale e ◑ al massimo.
   - Con VR e VB (piastra cinescopio) eliminare eventuali macchie di colore.
2. Taratura del punto di blocco.
   Una regolazione manuale non è possibile, poichè questa scheda incorpora una regolazione automatica della corrente d'interdizione.
   Controllo del punto di blocco (è necessario un oscilloscopio):
   - Applicare un monoscopio FuBK.
   - Regolare ◑ al minimo, ○ sul valore nominale e ◑ al minimo.
   - Collegare la sonda ai collettori dei transistori T736, T756, T776 (piastra cinescopio). Valore nero dei tre segnali catodici ca. 140...150 V.
3. Regolazione del canale colore.
   - Applicare un monoscopio PAL.
   - Regolare FK e H sul valore nominale, K al massimo.
   - Sull'integrato TDA 4555 collegare pin 28 a + 12 V.
   - Sull'integrato TDA 4555 collegare pin 17 a massa. Con C 9516 fermare le barre colorate scorrevoli.
   - Togliere i cortocircuiti.
   - Collegare la sonda a MP 12, con il regolatore BP e la bobina LZ portare a copertura le immagini doppie del segnale B.
   - Applicare un monoscopio SECAM.
   - Collegare la sonda al pin 1 dell'integrato TDA 4555, con la bobina DR portare la linea zero del segnale (R-Y) sul livello della frequenza di riga.
   - Collegare la sonda al pin 3 dell'integrato TDA 4555, con la bobina DB portare la linea zero del segnale (B-Y) sul livello della frequenza di riga.
   - La bobina F 2521 applicarla così in modo che il segnale (B-Y) sia chiaro.



Farb/RGB 29504-165.01 MULTI
Colour/RGB
Colore/RVB

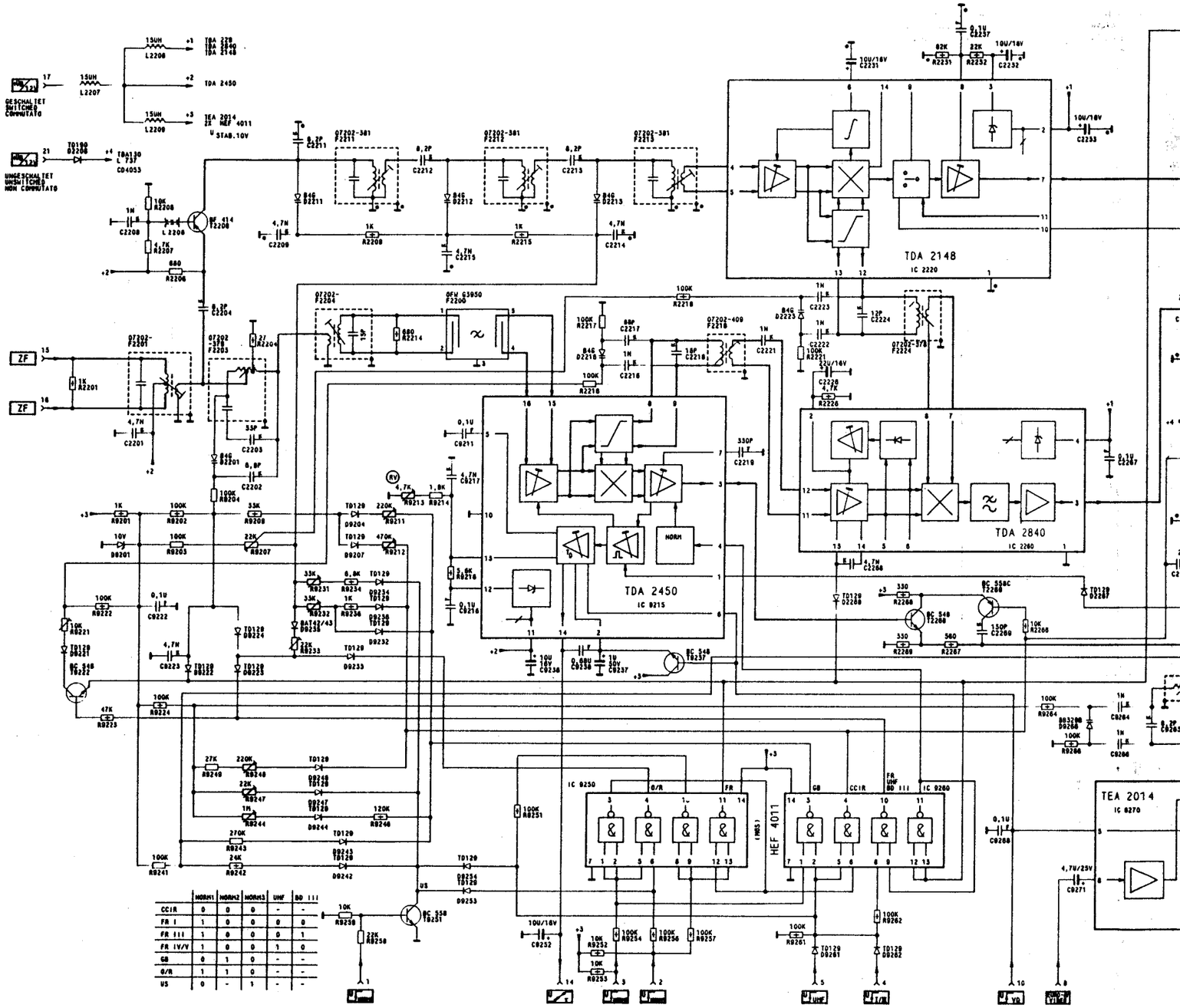


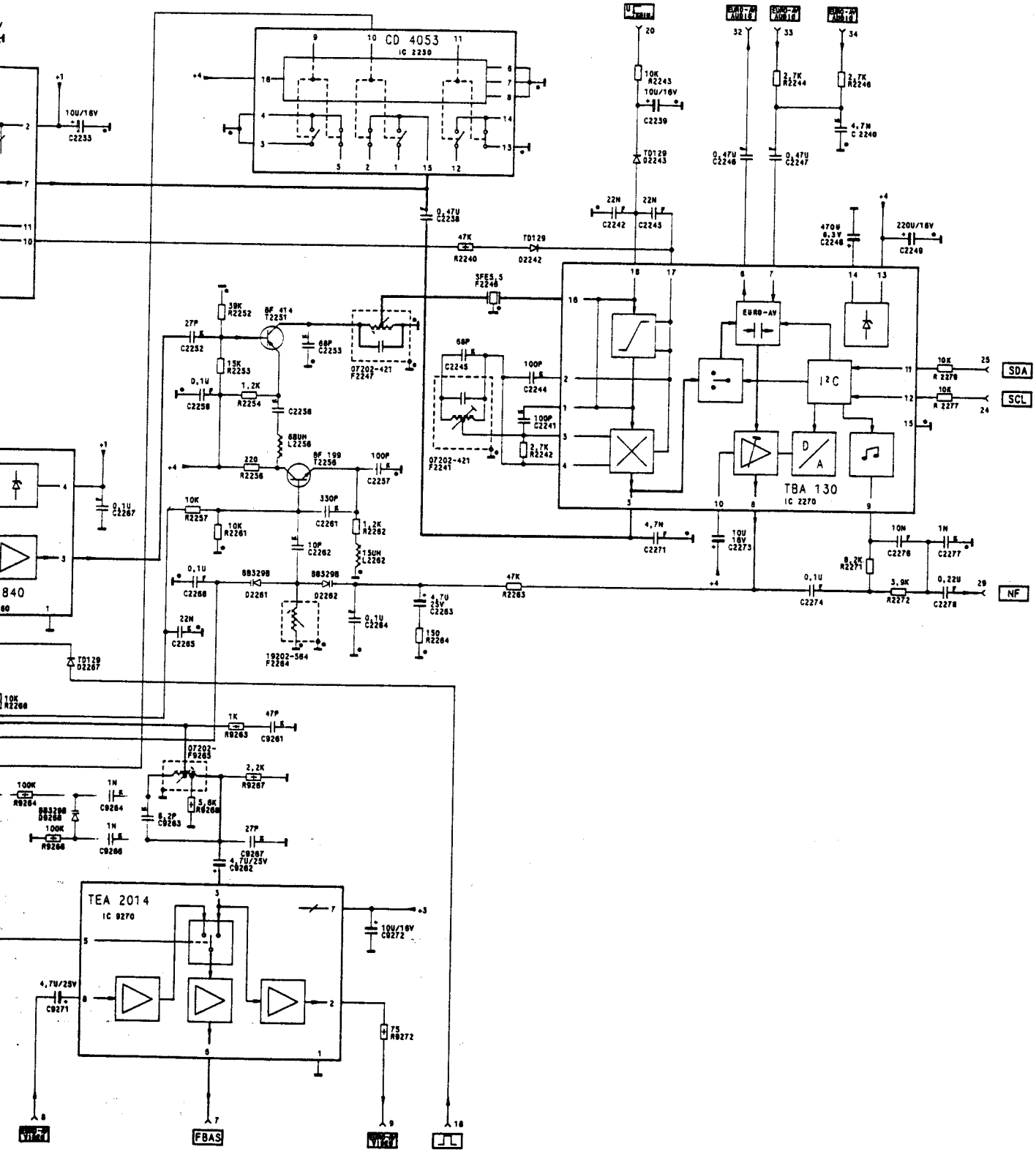


1. Weißabgleich
   - FuBK-Testbild einspeisen.
   - ◑min., ○nom., ◑max., einstellen.
   - Regler VR und VB (Bildrohrplatte) so einstellen, daß keine Verfärbungen in den Grauwerten sichtbar sind.
2. Sperrpunktabgleich
   Eine manuelle Einstellung ist nicht möglich, da die Steckkarte eine automatische Dunkelstromregelung besitzt. Kontrolle des Sperrpunkts (Oszilloskop erforderlich).
   - FuBK-Testbild einspeisen.
   - ◑min., ○nom., ◑min., einstellen.
   - Tastkopf an den Kollektoren der Transistoren T736, T756, T776 anhängen (Bildrohrplatte). Die Schwarzwerte der drei Kathodensignale liegen bei ca. 140 ... 150 V (26"-Geräte).
3. Einstellungen im Farbkanal
   - PAL-Testbild einspeisen.
   - FK nom., H nom., K max. einstellen.
   - IC-Pin 28 vom TDA 4555 mit + 12 V verbinden.
   - IC-Pin 17 vom TDA 4555 mit Masse verbinden.
   - Mit Trimmer C 9516 die durchlaufenden Farbbalken zum Stehen bringen.
   - Kurzschlußbrücken entfernen.
   - Tastkopf an MP 12, mit Regler BP und Spule LZ die Doppelbilder des B-Signals zur Deckung bringen.
   - NTSC-Testbild 3,5 MHz einspeisen.
   - IC-Pin 26 vom TDA 4555 mit 12 V verbinden.
   - IC-Pin 17 vom TDA 4555 mit Masse verbinden.
   - Mit Trimmer C 9514 die durchlaufenden Farbbalken zum Stehen bringen.
   - Kurzschlußbrücken entfernen.
   - SECAM-Testbild einspeisen.
   - Tastkopf an Pin 1 vom TDA 4555 anschließen, mit Spule DR Nullinie des (R-Y)-Signals auf Zeilenniveau bringen.
   - Tastkopf an Pin 3 vom TDA 4555 anschließen, mit Spule DB Nullinie des (B-Y)-Signals auf Zeilentastniveau bringen.
   - Spule F 2521 so einstellen, daß das (B-Y)-Signal keine Überschwinger hat.

1. White level adjustment.
   - Display colour bar test pattern.
   - Set ◑ to min., ○ to nom., ◑ to max.
   - Adjust presets VR and VB (CRT socket board) so that the picture does not show any colouration.
2. Adjustment of cut-off point.
   Manual adjustment is not possible, as the circuit board employs an automatic dark current control circuit.
   To check cut-off point (oscilloscope required), proceed as follows:
   - Display colour bar test pattern.
   - Set ◑ to min., ○ to nom., ◑ to min.
   - Connect test probe to collectors of T736, T756, T776 (CRT socket board). The black levels of the three cathode signals should be 140-150 V (26" sets).
3. Adjustments in chroma channel.
   - Display PAL test pattern.
   - Adjust colour level and brightness to nominal value, contrast to maximum.
   - Connect pin 28 of IC TDA 4555 to + 12 V supply.
   - Connect pin 17 to IC TDA 4555 to chassis. Adjust trimmer C 9516 for stationary pattern in colour bars.
   - Remove wire links.
   - Connect test probe to test point MP 12. Bring the double image produced by the B signal to coincidence by adjusting the preset BP and the coil LZ.
   - Display 3.5 MHz NTSC test pattern.
   - Connect pin 26 of IC TDA 4555 to 12 V supply.
   - Connect pin 17 of IC TDA 4555 to chassis.
   - Adjust trimmer C 9514 for stationary pattern in colour bars.
   - Remove wire links.
   - Display SECAM test pattern.
   - Connect test probe to pin 1 of IC TDA 4555.
   - Use coil DR to align zero level of the (R-Y) signal with the line black level.
   - Connect test probe to pin 3 of IC TDA 4555.
   - With coil DB to align zero level of the (B-Y) signal with the line black level.
   - Adjust coil F 2521 so that the (B-Y) signal is free of overshooting.

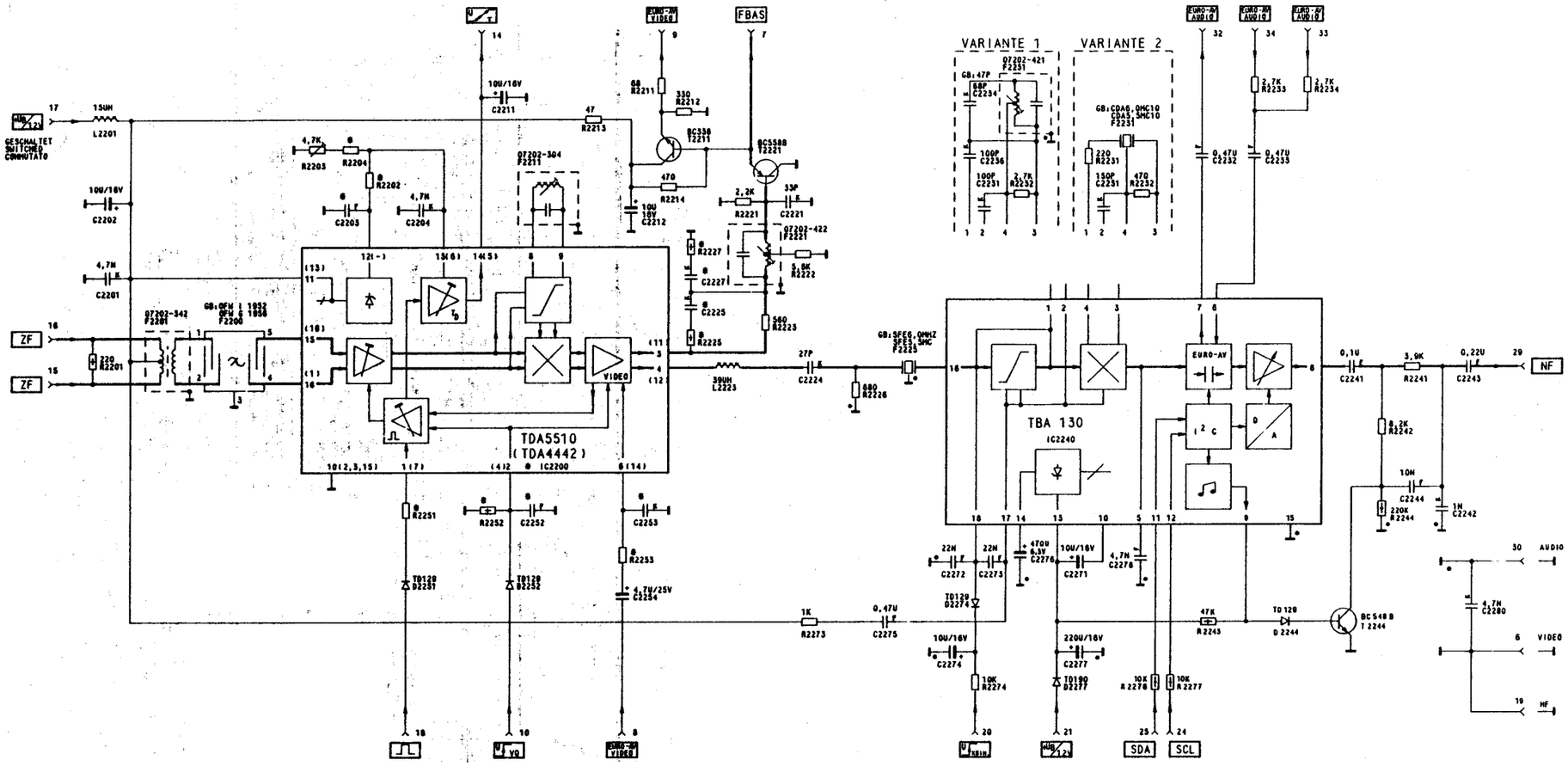
1. Taratura del bianco
   - Applicare un monoscopio FuBK
   - Regolare ◑ al minimo, ○ sul valore nominale e ◑ al massimo.
   - Con i regolatori VR e VB (piastra cinescopio) eliminare eventuali macchie di colore.
2. Taratura del punto di blocco
   Una regolazione manuale non è possibile, poichè questa scheda incorpora una regolazione automatica della corrente d'interdizione.
   Controllo del punto di blocco (è necessario un oscilloscopio):
   - Applicare un monoscopio FuBK.
   - Regolare ◑ al minimo, ○ sul valore nominale e ◑ al minimo.
   - Collegare la sonda ai collettori dei transistori T736, T756, T776 (piastra cinescopio). Valore nero dei tre segnali catodici ca. 140...150 V (apparecchi da 26").
3. Regolazione del canale colore.
   - Applicare un monoscopio PAL.
   - Regolare FK e H sul valore nominale, K al massimo.
   - Sull'integrato TDA 4555 collegare pin 28 a + 12 V.
   - Sull'integrato TDA 4555 collegare pin 17 a massa. Con C 9516 fermare le barre colorate scorrevoli.
   - Togliere i cortocircuiti.
   - Collegare la sonda a MP 12, con il regolatore BP e la bobina LZ portare a copertura le immagini doppie del segnale B.
   - Applicare un monoscopio NTSC 3,5 MHz.
   - Sull'integrato TDA 4555 collegare pin 26 a 12 V.
   - Sull'integrato TDA 4555 collegare pin 17 a massa.
   - Con C 9514 fermare le barre colorate scorrevoli.
   - Togliere i cortocircuiti.
   - Applicare un monoscopio SECAM.
   - Collegare la sonda al pin 1 dell'integrato TDA 4555, con la bobina DR portare la linea zero del segnale (R-Y) sul livello della frequenza di riga.
   - Collegare la sonda al pin 3 dell'integrato TDA 4555, con la bobina DB portare la linea zero del segnale (B-Y) sul livello della frequenza di riga.
   - La bobina F 2581 applicarla così in modo che il segnale (B-Y) sia chiaro.





Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto

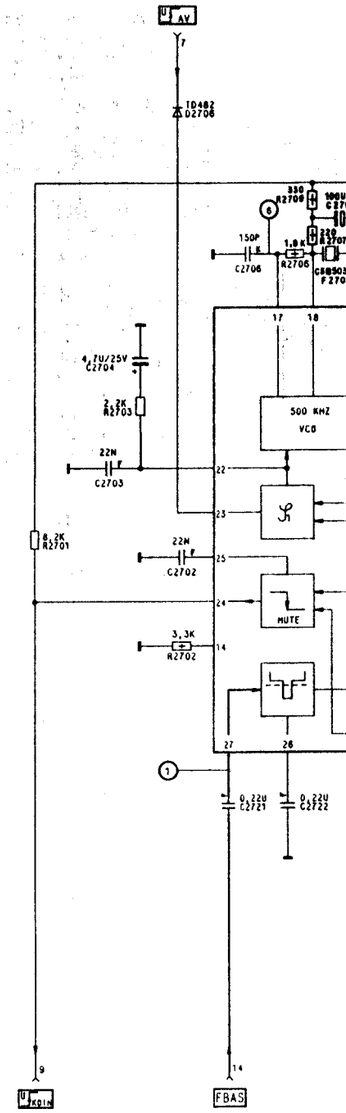
ZF-Verstärker Multi 29504-162.21
IF-Amplifier
Amplificatore FI

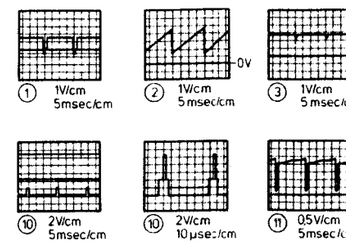


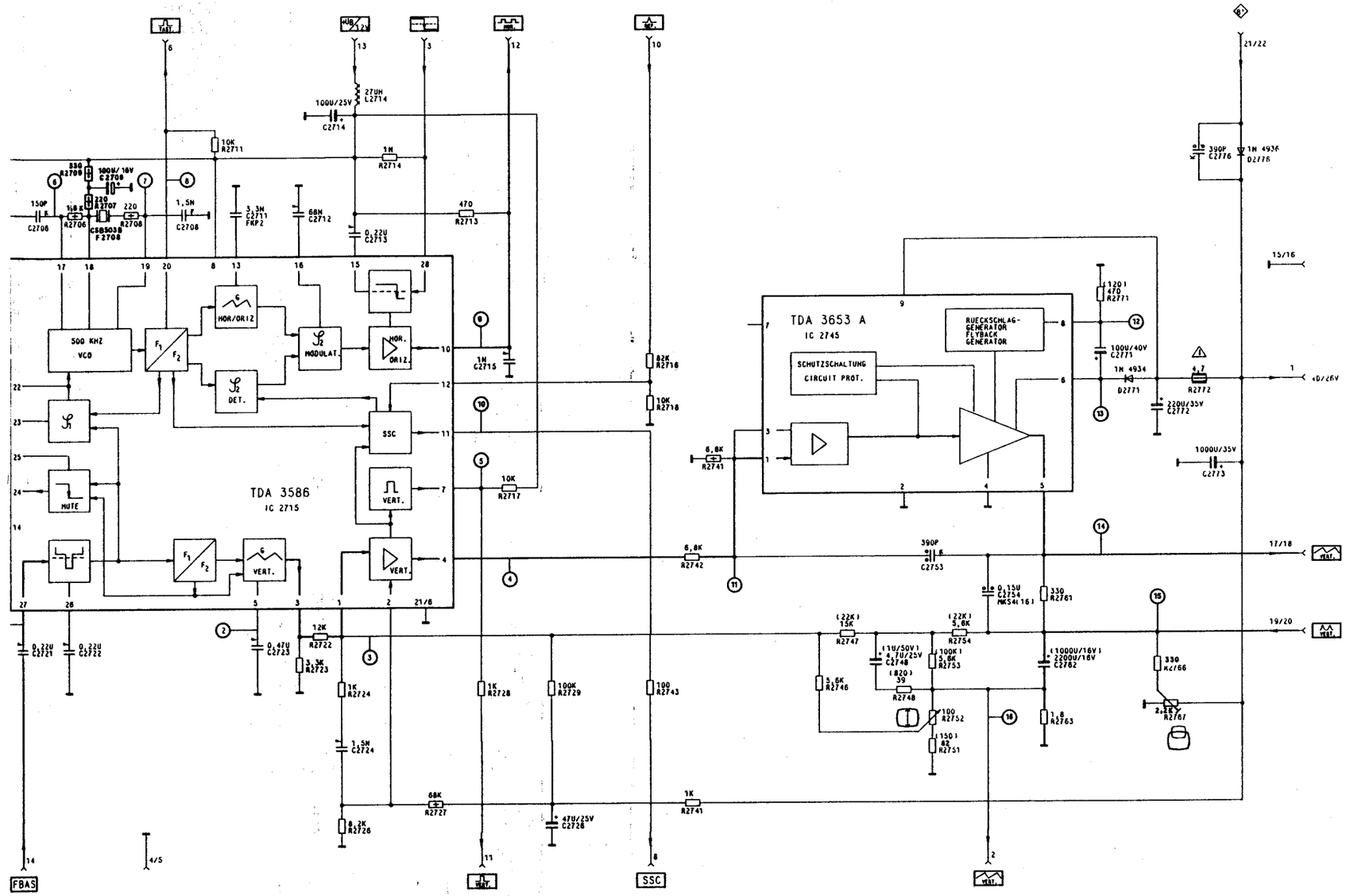
#	IC2200	R2202	R2204	R2225	C2225	R2227	C2227	R2251	R2252	C2252	R2253	C2253	C2203
-102.21 -112.21	TDA5510	5,6K	1,8K	1K	270P	—	—	⟷	—	0,68U	⟷	—	0,1U
-102.22	(TDA4442)	—	1K	—	—	820	39P	6,8K	100K	4,7U	470	100P	—

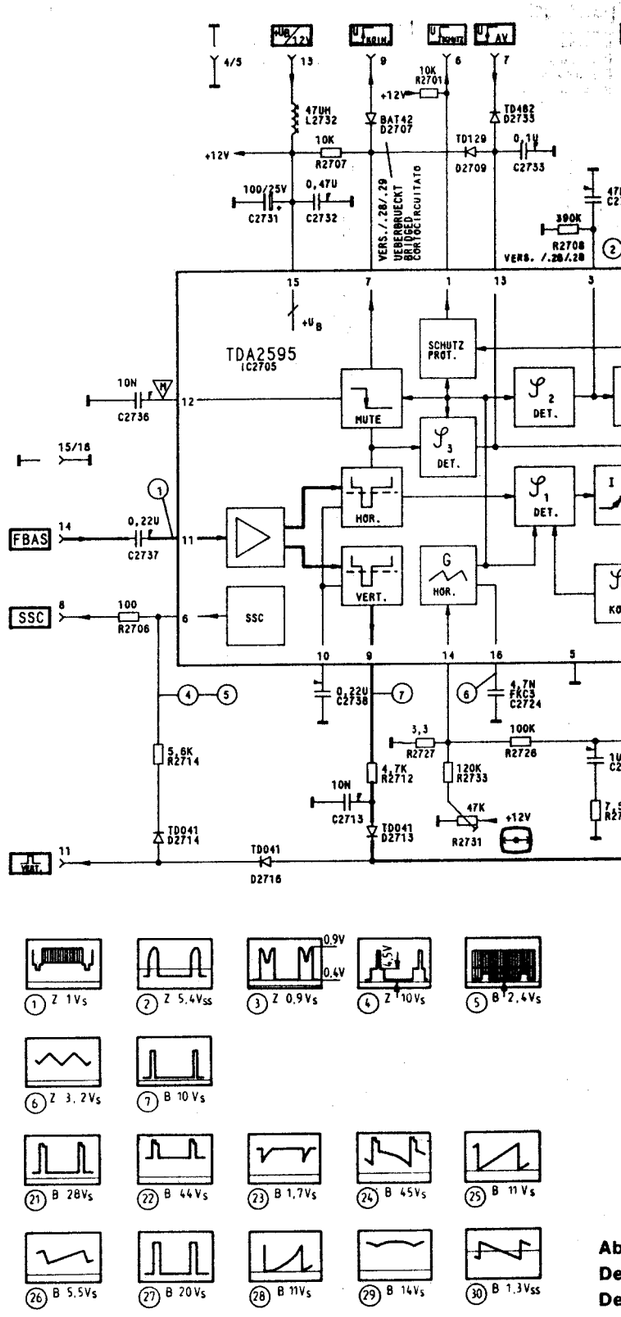
ZF-Verstärker 29504-102.21/22
IF-Amplifier -112.21 GB
Amplificatore FI

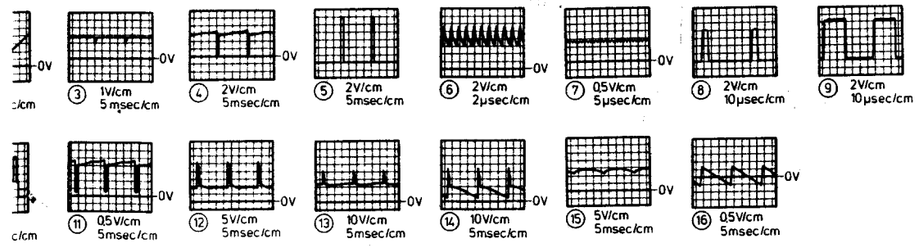
Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto





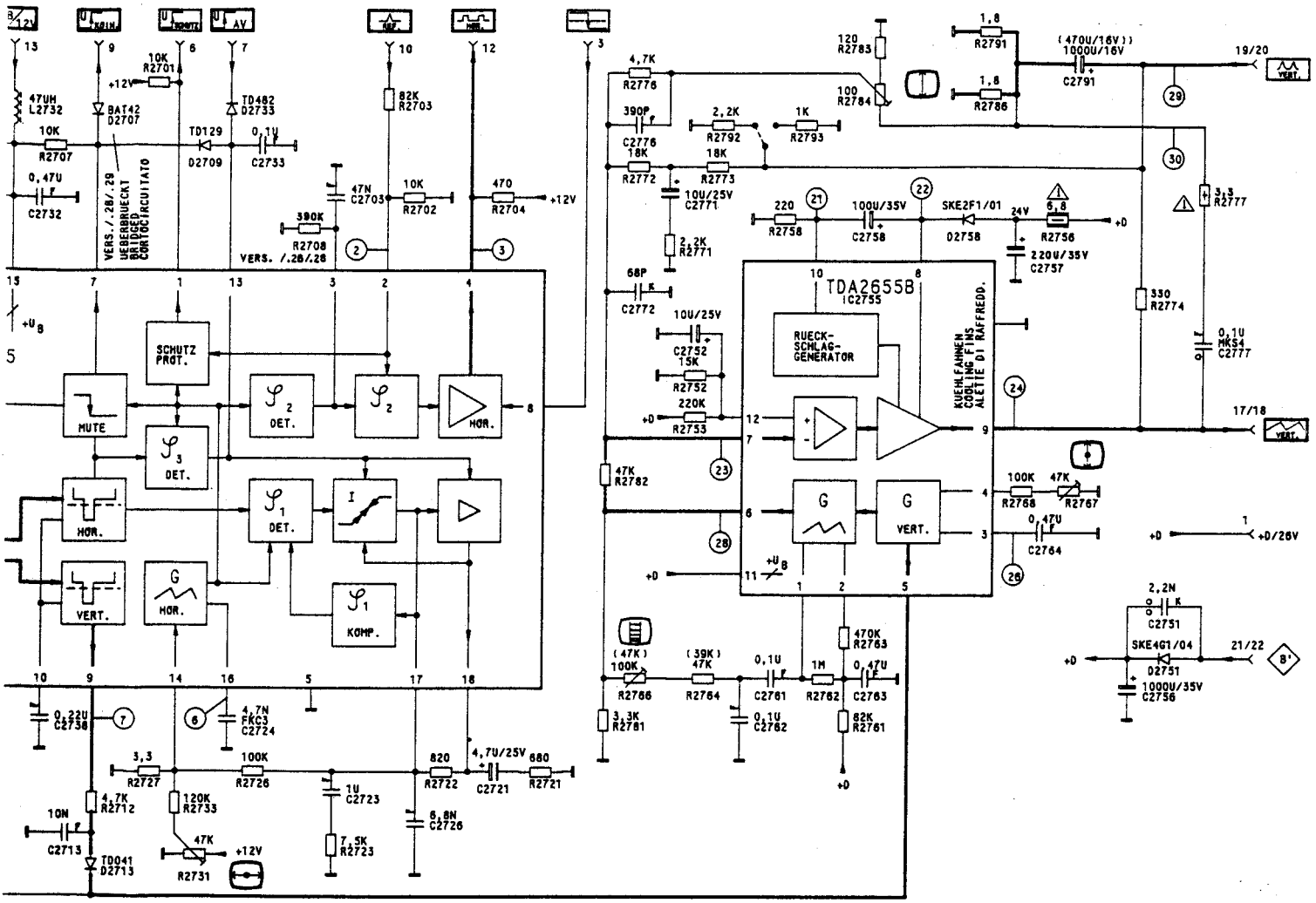


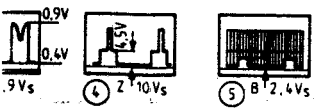


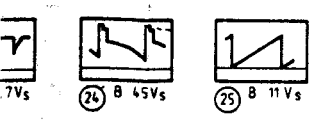


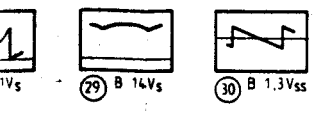
Ablenkung 29504-107.21
Deflection 107.22 Werte in ( )
Deflessione

Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto









Ablenkung 29504-007.28/.29
Deflection 007.29 Werte in ( )
Deflessione

Kein Anpassungsabgleich bei Austausch der Steckkarte notwendig
When replacing the plug-in board, no alignment is necessary
Non è necessaria nessuna taratura di adattamento dopo la sostituzione di una scheda ad innesto

estell-Nr./Part No. éf./Nr. d'ordinazioni	Benennung Description Désignation Denominazione
705-269-301	15 KΩ
700-229-017	4,7 Ω NB
700-001-140	2,2 Ω
700-000-001	1 Ω
705-269-249	100 Ω
705-328-993	0,51 Ω
705-329-261	330 Ω
703-441-095	8,2 KΩ NB
705-221-271	820 Ω
700-119-017	4,7 Ω
735-003-033	0,33 Ω
311-201-073	PTC 2 G/P 2390-J 146
730-179-229	7W/15 Ω
705-221-225	10 Ω
705-221-321	100 KΩ
700-000-073	1 KΩ
705-269-271	820 Ω
730-149-277	4W/1,5 KΩ 2)
705-321-083	2,7 KΩ
311-201-462	PTC 1 G/Q 63100-P 2462-J 29
730-199-016	11 W/4,3 Ω
311-400-125	VDR VZA 275
718-250-158	3,6 MΩ VDE
705-369-325	150 KΩ
718-250-014	4,7 MΩ VDE
700-161-131	270 KΩ
796-101-142	2,5 KΩ
750-210-049	7W/100 Ω
705-329-315	56 KΩ
735-003-022	0,22 Ω
735-003-022	0,22 Ω
705-227-013	3,3 Ω
700-051-071	82 KΩ
797-300-172	470 KΩ
790-047-135	1 KΩ
705-329-113	47 KΩ
705-369-103	18 KΩ
700-201-069	680 Ω NB
790-047-135	1 KΩ
705-329-113	47 KΩ
705-369-103	18 KΩ
700-201-069	680 Ω NB
315-617-004	1 A

t rechteck Bildröhre / used by flat square tube

Symbole und ihre Bedeutung
Symbols and their meaning
Simboli e loro significati

P — PROGR.

P1 — PROGR. TASTE / PROGR. BUTTON / TASTO PROGR. / TOUCHE PROGR.

MEMO — SPEICHERTASTE / MEMORY BUTTON / TASTO DI MEMORIA / TOUCHE MEMOIRE

NORM — NORMTASTE / TV STANDARD SELECT. BUTTON / COMMUT. DI NORMA / TOUCHE DE NORME

FEINABST. + / FINE TUNING + / SINT. FINE + / REGLAGE FIN +

FEINABST.- / FINE TUNING - / SINT. FINE - / REGLAGE FIN -

SUCHLAUF BD I / SELF-SEEK BAND I / SINT. AUTOM. BANDA I / RECHERCHE AUTOM. BANDE I

SUCHLAUF BANDWAHL III / SELF-SEEK BAND III / SINT. AUTOM. BANDA III / RECHERCHE AUTOM. BANDE III

SUCHLAUF UHF / SELF-SEEK UHF / SINT. AUTOM. UHF / RECHERCHE AUTOM. UHF

LAUTSTAERKE / VOLUME / VOLUME SONORE

FT — FEINABST. / FINE TUNING / SINT. FINE / REGLAGE FIN

KA — KANALWAHL / CHANNEL SEL. / SELEZ. CANALE / SELECT. DE CANAUX

BALANCE / BILANCIAM. / BALANCE

SUCHLAUF / SELF-SEEK / SINT. AUTOM. / RECHERCHE AUTOM.

$U_{T/B}$ — SCHALTSP. BANDWAHL / BAND SEL. SWITCHING VOLTAGE / TENS. DI COMMUT. SELEZ. BANDA / TENS. DE COMMUT. SELECT. BANDE

U_{VHF} — SCHALTSP. VHF / SWITCHING VOLT. VHF / TENS. DI COMMUT. VHF / TENS. DE COMMUT. VHF

U_{UHF} — SCHALTSP. UHF / SWITCHING VOLT. UHF / TENS. DI COMMUT. UHF / TENS. DE COMMUT. UHF

U_{AFC} — SCHALTSP. AFC / SWITCHING VOLT. AFC / TENS. DI COMMUT. AFC / TENS. DE COMMUT. AFC

U_{AV} — SCHALTSP. AV / AV SWITCHING VOLT. / TENS. DI COMMUT. AV / TENS. DE COMMUT. AV

U_{NORM} — SCHALTSP. NORM / SWITCHING VOLT. STANDARD / TENS. DI COMMUT. NORMA / TENS. DE COMMUT. STANDARD

$U_{COINC.}$ — SCHALTSP. COINZ. / SWITCHING VOLT. COINC. / TENS. DI COMMUT. COINC. / TENS. DE COMMUT. COINC.

$U_{EURO-AV}$ — SCHALTSP. EURO-AV / SWITCHING VOLT. EURO-AV / TENS. DI COMMUT. EURO-AV / TENS. DE COMMUT.

U_{VQ} — SCHALTSP. VIDEO QUELLE / SWITCHING VOLT. VIDEO SOURCE / TENS. DI COMMUT. SORG. VIDEO / TENS. DE COMMUT. SOURCE VIDEO

U_{DATA} — SCHALTSP. DATENBETR. / SWITCHING VOLT. DATA MODE / TENS. DI COMMUT. DATI / TENS. DE COMMUT. FONCT. DONNEES

$U_{4,5MHZ}$ — SCHALTSP. 4,5 MHZ / SWITCHING VOLT. 4,5 MHZ / TENS. DI COMMUT. 4,5 MHZ / TENS. DE COMMUT. 4,5 MHZ

U_{T} — REGELSP. VERZOEGERT / DELAYED CONTR. VOLTAGE / TENS. DI CONTR. RITARD. / TENS. DE REGUL. RETARDEE

U_{TUN} — ABSTIMMSP. TUNER / TUNING VOLT. TUNER / TENS. DI SINTONIA TUNER / TENS. D'ACCORD TUNER

U_{AFC} — REGELSP. AFC / AFC CONTROL VOLT. / TENS. DI CONTR. AFC / TENS. DE REGUL. AFC

MUTE — STUMMSCHALTUNG / MUTING / SILENZIAMENTO / SILENCIEUX

TASTIMPULS / GATING PULSE / IMPULSO A CADENZA / IMPULS. DE DECLENCHEMENT

VERT. — VERT. TASTIMPULS / VERT. GATING PULSE / IMP. A CADENZA VERT. / IMP. TRAME

VERT. — VERT. PARABEL / VERT. PARABOLA / PARABOLA VERT. / SIGNAL PARABOLIQUE

VERT. — VERT. SAEGEZAHN / VERT. SAW TOOTH / DENTE DI SEGA VERT. / SIGNAL DENT DE SCIE

HOR. — HOR. ANSTEUERUNG / HORIZ. DRIVE / PILOTAGGIO ORIZZ. / SYNCHR. LIGNES

REF. — REF. IMPULS / REFERENCE PULSE / IMP. DI RIFER. / IMP. DE REFER.

SCHUTZSCHALTUNG / CIRCUIT PROTECTION / CIRCUITO DI PROTEZIONE / CIRCUIT DE SECURITE

FARBTON / TINT / TINTA / TEINTE

REF. — REF. LAUTSTAERKE / VOLUME REF. VOLT. / TENS. DI RIF. VOLUME / TENS. DE REF. VOL. SONORE

HELLIGKEIT / BRIGHTNESS / LUMINOSITA' / LUMINOSITE

KONTRAST / CONTRAST / CONTRASTO / CONTRASTE

FARBKONTRAST / CONTRAST COLOUR / CONTRASTO COLORE / CONTRASTE COULEUR

FBAS — FBAS-SIGNAL / CCVS SIGNAL / SEGNALE SVCC / SIGNAL VIDEO COMPOSITE

SSC — SUPERSANDCASTLE

SB — STRAHLSTR. BEGR. / BEAM CURRENT LIM. / CORRENTE CATODICA MEDIA / LIM. COUR. DE FAISCEAU

SSB — SPITZ. STRAHLSTR. BEGR. / PEAK BEAM CURRENT LIMITING / CORR. CATODICA DI PICCO / LIM. DE FAISCEAU CRETE

R — ROT-SIGNAL / RED SIGNAL / SEGNALE ROSSO / SIGNAL ROUGE

G — GRUEN-SIGNAL / GREEN SIGNAL / SEGNALE VERDE / SIGNAL VERT

B — BLAU-SIGNAL / BLUE SIGNAL / SEGNALE BLU / SIGNAL BLEU

Y — Y-SIGNAL / SEGNALE Y / SIGNAL Y

F — F-SIGNAL / CHROMA SIGNAL / SEGNALE F / SIGNAL CHROMA

SW — SCHWARZWERT / BLACK LEVEL / LIVELLO DEL NERO / NIVEAU DU NOIR

NF — NF-SIGNAL / AF SIGNAL / SEGNALE BF / SIGNAL BF

NF-L — NF-SIGNAL LINKS / AF SIGNAL LEFT / SEGNALE BF SINISTRA / SIGNAL BF GAUCHE

NF-R — NF-SIGNAL RECHTS / AF SIGNAL RIGHT / SEGNALE BF DESTRA / SIGNAL BF DROIT

EURO-AV VIDEO — VIDEO SIGNAL EURO-AV / SEGNALE VIDEO EURO-AV / SIGNAL VIDEO NORME FR

EURO-AV AUDIO — AUDIO SIGNAL EURO-AV / SEGNALE AUDIO EURO-AV / SIGNAL AUDIO NORME FR

U_{LED} — SCHALTSP. LED / LED SWITCHING VOLT. / LED TENS. DI COMMUT. / TENS. DE COMMUT. LED

IR — IR-SIGNAL / SEGNALE IR / SIGNAL IR

U_{G1} — SPG. GITTER 1 / VOLTAGE GRID 1 / TENS. GRIGLIA 1 / TENS. GRILLE G1

U_{FOC} — FOKUSSP. / FOCUSSING VOLTAGE / TENS. DI FOCALIZZ. / TENS. DE FOCALIS.

U_{H} — HOCHSPANNUNG / EHT VOLTAGE / ALTA TENS. / HAUTE TENS.

U_{SG} — SCHIRMGITTERSP. / SCREEN-GRID VOLT. / TENS. GRIGLIA SCHERMO / TENS. GRILLE-ECRAN

TE — TEXT ENABLE

SCL — I^2C-CLOCK

VCL — VCR-CLOCK

ICL — I-BUS-CLOCK

SDA — DATEN / DATA / DATI / DONNEES

ZF — ZF-SIGNAL / IF SIGNAL / SEGNALE FI / SIGNAL FI

PP — PAL PRIORITAET / PAL PRIORITY / PRIORITA' PAL / PRIORITE PAL

F-DIR. — F-SIGNAL DIREKT / F SIGNAL DIRECT / SEGNALE F DIRETTO / SIGNAL CHROMA DIRECT

F_V — FV-SIGNAL / FV SIGNAL / SEGNALE FV / SIGNAL FY

F_U — FU-SIGNAL / FU SIGNAL / SEGNALE FU / SIGNAL FX

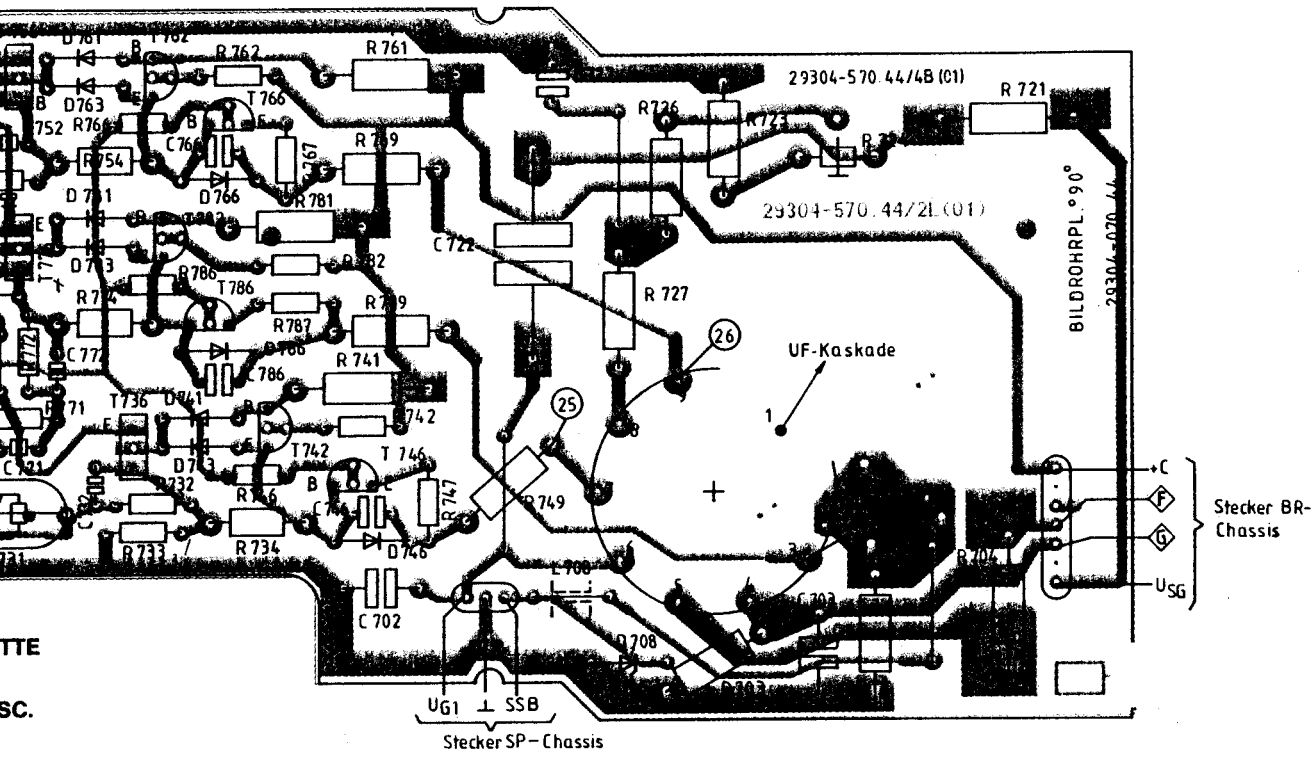
F-VERZ — F-SIGNAL VERZOEGERT / F SIGNAL DELAYED / SEGNALE F RITARD. / SIGNAL CHROMA RETARDE

DL — VERZOEGERUNGSLEITUNG / DELAY LINE / LINEA DI RITARDO / LIGNE A RETERD

U_{SCHUTZ} — SCHALTSP./SCHUTZFUNKTION / SWITCHING VOLT. /PROTECTIVE FUNCTIO / TENS. DI COMMUT. /FUNZ.DI PROTEZ. / TENS. DE COMMUT. / SECURITE

⚠ BEI ERSATZ AUS SICHERHEITSGRUENDEN NUR ORIGINAL
FOR REASONS OF SAFETY USE ORIGINAL PARTS ONLY W
IN CASO DI SOSTITUZIONE UTILIZZARE PER RAGIONI
PEZZI DI RICAMBIO ORIGINALI.
EN CAS DE REMPLACEMENT N'UTILISER, POUR DES RA
QUE DES PIECES D'ORIGINE.

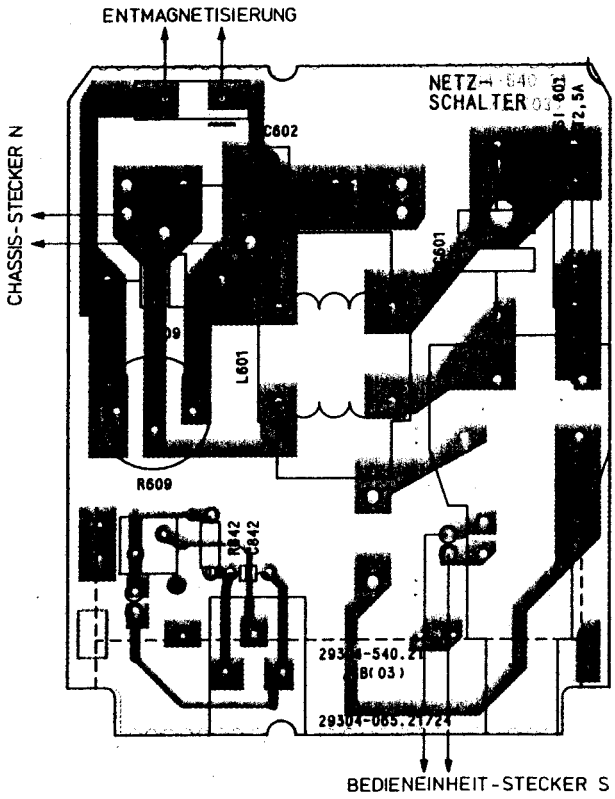
BEI EINGRIFFEN SCHUTZMASSNAHMEN FUER MOS-BAUTEILE BE
WHEN HANDLING MOS-CIRCUITS, ALWAYS OBSERVE THE MOS P
ADOPERANDO COMPONENTI O CIRCUITI MOS OSSERVARNE LE
MISURE DI PROTEZIONE!
LORS DE LA MANIPULATION DES CIRCUITS MOS, RESPECTER
PRESCRIPTIONS MOS!



TTE

SC.

NETZSCHALTERPLATTE
MAINS SWITCH BOARD
PIASTRA INTERR. DI RETE



EURO - AV - BUCHSE
EURO AV SOCKET
PRESA EURO AV
BEDIENEINHEIT - STECKER MP
BEDIENEINHEIT - STECKER R
BR-PLATTE - STECKER BR
KASKADE K536
NETZSCHALTER
29304-634.01/2L(03)